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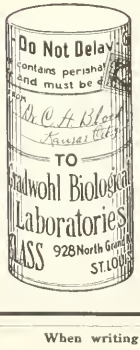

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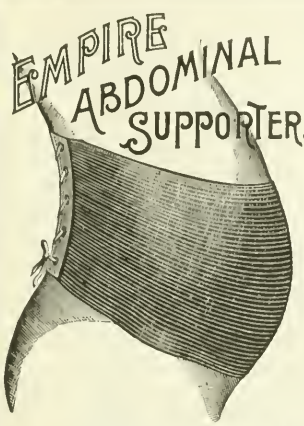

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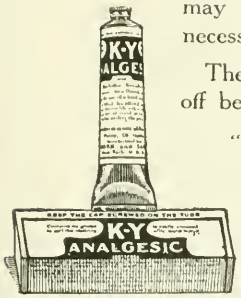

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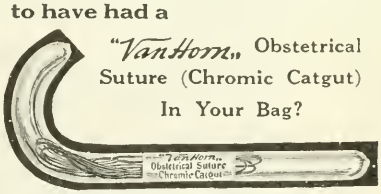

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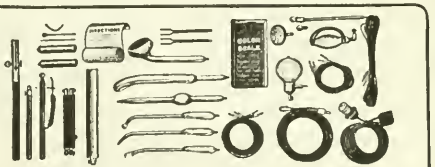

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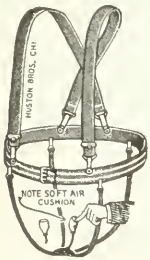

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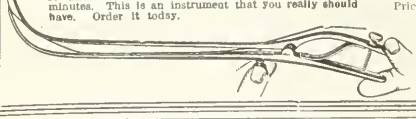

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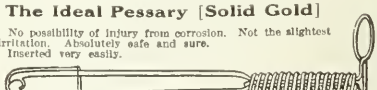

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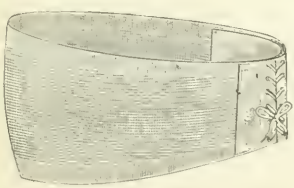

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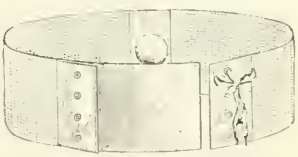

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DR. HUGH S. CUMMING

Surgeon General of the U. S. Public Health Service

Doctor Cumming, who recently succeeded Surgeon-General Rupert Blue, in charge of the U. S. Public Health Service, was born in Hampton, Virginia, in 1869; graduated in medicine from the University of Virginia, 1893, and from the University College of Medicine, Richmond, in 1894. He has been attached to the Public Health Service since 1894, his professional interest having been devoted mainly to preventive medicine and quarantine.

The American Journal of
CLINICAL
MEDICINE
Dependable Therapeutic Fact for Daily Use

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The Patient Himself

IN his presidential address to the Chicago Institute of Medicine, Dr. Hugh T. Patrick said a few things well worthy of perpetuation. Moreover, his thoughts were conveyed in language so peculiarly direct and convincing that more than half a dozen sentences might—indeed, may—well become aphorisms. His subject was that much neglected individuals. "The Patient Himself," meaning thereby "what we mean when we speak of our friend, our enemy, our son, our daughter. We like a man because he is sensible, kind or entertaining; dislike him because he is selfish, irritable or pessimistic. So do we admire or despise because of certain mental, not, physical, qualities; *traits that reside above the eyebrows.* Our attitude depends upon the individual's personality—the biggest thing to us and to him. It is more important than his kidneys and his liver, and its disorders are as momentous to him and to society as is disease of his organs. His personality is what he *is*—the man himself—and he is the sum of all his tendencies and experiences, his desires, aversions, affections, hates, passions, inhibitions, appetites, reflections and knowledge." (*Journ. A. M. A.*, Jan. 10.)

This is "The Patient Himself," for a better understanding of whom, by the physician,—similarly constituted, alas!—Patrick pleads. "Concerning his organs and their functions," he cogently remarks, "we have numberless tomes. Concerning the diseases that attack his parts, we have whole libraries. Concerning the various ways of cutting him open and sewing him up, there are several six-foot shelves. For the manifold instruments, machines and appliances of our armamentarium, an extensive congeries of industries is in constant operation. *Indeed, some of us are so used to practicing medicine by machinery that the cortical cell bids fair to shrink into sterile desuetude.* But, of the patient

himself—the man, the woman, the child—relatively little is thought or written."

Here is enunciated a great truth. Too many of us *are* practicing medicine mechanically and, perhaps, the more "scientific" our procedure, the more mechanical our treatment. The old-fashioned "family physician," limited as was his knowledge of psychology, dyshormonies, "neuroses as a result of maladaptation" and a host of other things, did study the patient himself and was quite prone to be the possessor of each family's deepest secrets. He gave sage counsel together with his medicine and took a personal interest in the general welfare of his patients. The doctor of today is likely to have a filing system wherein Mr. Smith may be "S. No. 100" and Mrs. Smith "S. No. 7." When either patient calls, his office girl hands him the record and further treatment usually is based upon ideas conveyed by the written data, *not* upon present study of the individual. Moreover, the thought that there may be a vital connection between cases "S. No. 100" and "S. No. 7" is not prone to occur to the doctor. He endeavors to recognize "pathological conditions present in the individual"—which is laudable enough—and, having made his diagnosis, institutes measures for their correction, but, nine times out of twelve, such measures are of the routine order—"mechanical," if you please. From initial examination to discharge, the ego of the patient is considered only from the most superficial viewpoint.

As Patrick points out—and he drives home his arguments with illustrative case reports—"Some of us have neuroses or psychoses because we are unable successfully to harmonize with our environment—*and for no other reason.* Certain it is, that the physician, knowing nothing of his patient's psychic conflicts or environmental misfits, is in no position to treat intelligently certain disorders of which he may complain.

Patrick says that neuroses "are a way out of trouble or around an obstacle; a way selected more or less unconsciously. If one cannot remove an obstacle from his path and cannot surmount it, he goes around. Perhaps he *can* push it away, or *can* surmount it; but he *prefers* to go around. For our patients, the way around is, often, insomnia, 'nervous breakdown,' backache, dysmenorrhea, asthenopia, indigestion, headache, abdominal pain, dyspareunia, impotence, exhaustion, palpitation and many other things for which medicines are given and operations performed."

Again he remarks: "When we come to therapeutics for the patient himself, many of us have a sort of amblyopia algera. We do not see because it is uncomfortable to see. It is much more comfortable to say, 'nothing to it,' 'just a nervous crank' and do nothing, than it is to realize that here is a pathologic condition, obscure, maybe complex, that must be laboriously worked out. So, we naturally go blind, see nothing and do nothing. Probably, every physician makes an effort to regulate the bowels. How many of us make an effort to regulate emotional and intellectual movements? But, intestinal stasis is vastly to be preferred to intellectual stagnation: so-called autointoxication is not half so lethal as disintegrating emotions.

"To state it another way, we must first have a just conception of the nature of the trouble and then institute *appropriate* treatment. Nowadays, few ovaries are removed for dizziness and indigestion, but, the 'rest cure' is applied about as heedlessly as was formerly oophorectomy. Confinement to bed, isolation, forced feeding and massage for perturbations of the personality may be compared to a linseed poultice for pain in the belly. Occasionally, the cataplasm suffices, but, treatment of the cause is to be preferred. Equally, we should treat the cause of neurotic manifestations. Who would prescribe a pill for vagrancy or a powder for prostitution? The tramp and the prostitute are recognized as defectives, unadaptable to society as now constituted, except on the underworld level. The psychasthenic (nearly always miscalled neurasthenic), the neurotic, the psychotic is a rather similar product. Unadapted to the upper strata of social efficiency, he gravitates to the underworld level of pain, prostration and dyspepsia: the realm of consultation rooms, hospitals and sanatoriums. But, I hasten to add that, when properly adjusted to his environment, the neurotic may be one of the most efficient, valuable and delightful members of society."

To all of which we append a fervent Amen! Patrick has said, in his inimitable

way, things many of us have long thought and it is to be sincerely hoped that his utterances will cause many practicians to exercise their cortical cells more actively than has been their wont.

The future destiny of the child is always the work of the mother.—Napoleon.

MOTHER'S DAY

On May 8, 1914, the following resolution, passed by the Senate and House of Representatives of the United States of America, was approved.

"Whereas, the service rendered the United States by the American mother is the greatest source of the country's strength and inspiration; and,

"Whereas, we honor ourselves and the mothers of America when we do anything to give emphasis to the home as the fountain head of the state; and,

"Whereas, the American mother is doing so much for the home, the moral uplift and religion, hence so much for good government and humanity; therefore, be it

"Resolved, by the Senate and House of Representatives of the United States of America in Congress assembled. That the President of the United States is hereby authorized and requested to issue a proclamation calling upon the government officials to display the United States flag on all government buildings, and the people of the United States to display at their homes or other suitable places on the second Sunday in May as a public expression of our love and reverence for the mothers of our country."

Sec. 2. That the second Sunday in May shall hereafter be designated and known as Mother's Day, and it shall be the duty of the President to request its observance as provided for in this resolution.

In accordance with this custom, which had received its impetus, early in 1908, through the efforts of Miss Anna Jarvis, of Philadelphia, the second Sunday of this present month of May will, like its predecessors, be dedicated to the mothers of America. It is customary that those whose mothers still are living wear red carnations in their honor; while those whose mothers have passed on wear white carnations in honor of their memory.

We are not going to attempt a panegyric on our mothers. Everybody who is fortunate enough to have, or to have had, what the boys might call a "regular mother", will pronounce one for himself. Nevertheless, it was a suitable action on the part of congress to set aside this one day out of the three hundred and sixty-five of the year to do particular honor to the mothers of the country.

We are wishful to call attention to this occasion and perchance, to remind some brother doctor who otherwise might have forgotten. Especially would we encourage them to remind their boys, those in the heedless and forgetful years, that they remember their mothers by a donation of flowers, be it ever so small. Many times, it may be a pleasing surprise that gives great happiness to Mother, while, to forget the occasion, may cause disappointment and heart ache.

Let's remember.

Ignorance is the curse of God, knowledge the wing wherewith we fly to heaven.—Shakespeare.

THE VOCATIONAL SCHOOL FOR THE TUBERCULOUS

Among the leading articles in this issue of CLINICAL MEDICINE, there is an unusually interesting communication, by Dr. John Dill Robertson, the Chicago Commissioner of Health, concerning the work of the vocational school that is conducted in the Chicago Municipal Tuberculosis Sanitarium. We desire to call particular attention to this undertaking of the Chicago tuberculosis institution, for the reason that the finding of a suitable occupation and the installation of adequate, yet, noninjurious activity and exercise on the part of the tuberculous patients is of the greatest importance for their well-being and for the chances for success of the treatment.

Graded exercise is by no means new to tuberculosis physicians, it having been instituted, as told by Doctor Robertson, by Herman Brehmer, of Goerbersdorf. His idea was, that the congenitally small heart, which he held to be an important predisposing factor, would be placed in a condition of greater functioning power by exercise. It may be remembered that Sydenham urged his consumptive patients to take exercise on horseback, and Benjamin Rush ("Medical Inquiries and Observations") relates that a mail rider of his acquaintance was cured of consumption through this means. All these early attempts, however, were more or less crude, and it remained for Paterson, together with

Inman, to elaborate a definite plan by which tuberculous patients, who had overcome the active and febrile period of their illness, might be benefitted by carefully graded, and guarded, exercise. Their idea was, that exercise stimulated the production of opsonins through producing an increased absorption of toxins and, then, promoting autoimmunization.

There is another phase to the problem, however, and one that led to the actual vocational therapy that is now in operation, not only in many tuberculosis sanatoria, but, also, in institutions for mentally deranged patients; and, that is, the favorable psychic effect of occupation, the beneficial action of accomplishment, upon the morale of the patient. This has been worked out in the direction of definite productiveness and creation and it has been found that the mental attitude of those patients who are permitted to do some useful, constructive work is very much better than that of other patients of equal clinical circumstances but who are subjected to an unconditional rest cure.

We urge a careful study of Doctor Robertson's communication and suggest that physicians having consumptive patients in charge get away from the absolute and positive rest-cure idea. It is better to differentiate and to occupy consumptive patients, once they are free from fever, than to leave them at the mercy of their lugubrious thoughts, uninterrupted by activity, which only too often leads to incurable laziness.

A man never thinks of a pair of shoes that fit all right. It is the shoes that give us corns that we pay attention to.—Wilbur Hall.

"THE ART OF RIGHT LIVING"

Are physicians materialists? Time was, when that question might have been answered affirmatively with perfect justice. At least, for the majority of medical men, it was believed to be clever, or "scientific," to accept nothing that could not be demonstrated with the scalpel or found under the microscope. Whatever could not be shown to exist, to the material senses, was held to be nonexistent. "I cannot see it, hear it, feel it, taste it—therefore, it does not exist."

That attitude has been abandoned long ago. While there may be found, here and there, physicians who deny that which they cannot realize with their physical senses, who dispute the right of existence to everything that they cannot understand, most of us have, in course of time, been forced to admit the ages-old truth that there are more things in heaven and earth than are dreamt of in our philosophy.

If, somewhat over a century ago, the demonstrations of Mesmer of certain not-understood, or occult, manifestations of mind were received by the medical profession as fraud, the intervening years have shown Mesmer to have stumbled upon one of the many truths that had not been realized.

However, all this philosophizing might lead us too far, if indulged in unduly. The point that we wish to make is, that physicians are not materialists; that their studies and their lives necessarily make them into idealists. You say that that is not so; that the constant work among the sick, the many disappointments, the frequent instances of ingratitude, all unite to make physicians lose their illusions and cause them to become crassly practical, and, in short, materialistic. Far from it. A man may lose his illusions, if they have been overdrawn, he may become matter-of-fact and crabby, and yet, no physician who is at all worthy of his name, can continue in his calling unless he retains, and preserves, certain ideals that he strives to attain. No physician can continue, year after year, aiding the suffering, helping those in pain, and, despite occasional ingratitude and disappointments, lose his faith in the essential nobility of the human soul.

All this is merely by way of introduction. We are delighted to be able to tell the readers of CLINICAL MEDICINE, that our good friend, philosopher, idealist and brother-physician, Dr. George F. Butler, Medical Director of the North Shore Health Resort, Winnetka, Illinois, inaugurates, in this issue of CLINICAL MEDICINE, in his department "Just Among Friends," a series of articles in which he is at his best. And, as you know, that means a whole lot.

Doctor Butler never has permitted the everyday, dull, routine occurrences of the physician's life to overcome his ineradicable idealism. No matter what are the disappointments, the disillusions and occa-

sional lapses into pessimism, ultimately his inherent optimism comes to the top and brings out the cheery, kindly, human philosopher who finds the good and the beautiful everywhere, and forgets, or overlooks, the bad and the unlovely.

In this series of articles which he calls "Common Sense Comments on Health, Happiness and Longevity," Doctor Butler addresses both physicians and the laity. In this he has done well, because he provides the physician with material, in suitable form, that the latter can pass on to his patients. It is well to realize that we have not done our full duty by our patients when we have examined them with all care, given a prescription or other treatment, and impressed upon them those directions as to diet, hygiene, rest and occupation that seem suitable for them. It is a fact that those little heart-to-heart talks, that wise physicians give to their patients, often are of far greater benefit to them than is the actual treatment. The physician who has learned the lesson of life and who has come to understand the soul-needs of his patients, as well as their physical requirements, knows that he can influence them for good in a degree that is not equalled in any other relation, not even in that between clergyman and parishioner.

Now then, we have, in Doctor Butler's series of essays, guidance for just such talks. What the public needs, Doctor Butler opines, is, a little more common sense regarding medical matters, with a little more hope and less fear thrown into them, and here we have an important truth. Hope, cheer, optimism, are far better remedies, far more useful means for benefitting the sick than are lugubrious expressions, shaking of the head, fear and doleful prophecies. Other things being equal, the physician who cheers his patients, greets and leaves them with a smile, will be more successful than the crape-hanger.

So, we have introduced Doctor Butler's latest brain-child. May it speed on its way, doing good, helping physicians to help their patients.

BENZYL BENZOATE—A RELAXANT

In CLINICAL MEDICINE for February, attention was called to benzyl benzoate, a powerful antispasmodic and pain-reliever, that has been found to possess great merit in the treatment of dysmenorrhea, also for the relief of labor pains and the prevention of miscarriage.

In accordance with the general antispasmodic action of benzyl benzoate, this remedy has been employed, with marked success, in a variety of painful conditions, and it is evidently of considerable interest to the clinicians.

The reports on the favorable action of benzyl benzoate induced the present writer to prescribe the remedy for three small children, in one family, all of whom had whooping cough. The general hygienic-dietetic directions had been obeyed and complications forestalled, the family having made up their minds to have the cough continue for the regulation six-weeks period. However, it was found that, under continued treatment with benzyl benzoate, the paroxysms of whooping cough were controlled very satisfactorily so that the severity of the affliction was greatly lessened, even though, so far, the duration of the trouble has not been cut down.

This is but an isolated instance and we should like to urge physicians to investigate this promising remedy in this, as well as in other spasmodic conditions.

No mother who stands upon low ground herself can hope to place her children upon a loftier plane. They may reach it, but it will not be through her.—Julia C. R Dorr.

TREATING URETHRAL CALCULUS

Among the leading articles in this issue of CLINICAL MEDICINE, there is a story by Col. Richard Slee, relating how he removed, from his dog Mickie O'Neil, a considerable number of calculi that had worked their way into the urethra and had given rise to complete suppression of urine.

Doctor Slee extracted the concretion, after having put the dog under the influence of hyoscine and morphine with cactin, and the relaxant action of this narcotic was beautifully exemplified in the repeated operative procedures undertaken by Colonel Slee.

In this connection, we are reminded of some investigations carried out by Doctor Macht and referred to in CLINICAL MEDICINE for January, 1918, on page 51. According to this report, Doctor Macht conceived the idea, from his observations of

the relaxant action of papaverine, to introduce a solution of this drug through the catheter directly into the ureter of the patient who was suffering from ureteral calculus. Five mils of a 2-percent solution of papaverine hydrochloride was introduced into the ureter just below the stone. On the same afternoon, slight colicky pains appeared, during which the stone descended a considerable distance. After a second injection of the papaverine, the calculus was passed spontaneously.

This experience found confirmation in several observations reported by H. W. E. Walther in *The Urologic and Cutaneous Review* for September, 1916. This writer relates the cases of three patients suffering from ureteral calculus, in all of whom the injection of papaverine into the ureter, just below the stone, was followed by the discharge of all calculi present, and the expulsion was virtually painless in every instance. Doctor Walther employed the sulphate of papaverine because of its greater solubility.

Of even greater efficacy, appears to be the new relaxant elaborated by Professor Macht, namely benzyl benzoate. It was found that papaverine belongs to the "benzyl-isoquinolin" group of opium alkaloids, the members of which inhibit contraction and lower the tonus; the benzyl part of the papaverine molecule being, thus, clearly relaxant. Further studies were undertaken, resulting in the production of the antispasmodic drug benzyl benzoate.

A man's honest, earnest opinion is the most precious of all he possesses; let him communicate this if he is to communicate anything.—Carlyle.

INTRAVENOUS MEDICATION

Among the leading articles of this issue, there is an interesting and instructive report by Dr. Albert C. Geyser, of New York, concerning the prompt and beneficial results of this mode of administering potent remedies. While warnings have been published, justly, in *The Journal of the American Medical Association*, for instance, against the indiscriminate and reckless employment of this procedure, and while it must be acknowledged that the intravenous route for the administration of powerful drugs should be taken only by those conversant with its technic, and, invariably, under the most carefully guarded conditions, neither the warnings nor the necessary precautions can justify such unfavorable criticism against the method itself as has been published here and there.

It is not only new theories attempted to explain the causes and nature of diseases, but, it is likewise new methods of treatment that almost invariably are criticized adversely by many members of the medical profession who prefer to go on in the even tenor of their ways rather than make themselves familiar with innovations and go to the trouble necessary for the acquiring of new knowledge and of new methods that may be complicated and difficult.

However, while it may be admitted that, like every other new method, the intravenous mode of introducing drugs into the system has been abused occasionally and applied improperly, it can not be gainsaid that, under suitably controlled circumstances, it offers actually the best way for securing prompt and certain results. This is readily understood if it is considered that the remedies introduced directly into the circulation are necessarily prepared in such a manner as to be absorbable and assimilable immediately and that they are rapidly carried through the entire circulation, exerting their effects on this as well as on the nervous system and, likewise, upon those tissues for which they may perchance possess a selective action.

DRUGS SUITABLE FOR INTRAVENOUS MEDICATION

When the intravenous mode of introducing remedies into the system first was adopted, it was limited almost entirely to the injection of sodium chloride, in solution isotonic with that of the blood; that is to say, the socalled physiologic-salt solution. In the course of time, however, certain medical men, more daring than others, adopted this means for introducing medicines into the circulation, either in order to secure prompt and rapid action or because the intramuscular and hypodermic injections gave rise to painful swellings and, often, to abscess formations or because these remedies in sufficient dosage, when given by mouth, ultimately caused derangement of the digestive organs.

It is not so many years ago that medical men promoting treatment of various dis-

cases by means of intravenous injections were looked at askance. That is a little habit that we have and is illustrated, incidentally, in Dr. J. D. Rockwell's "Rambling Recollections", recently published by Paul B. Hoeber, New York. To deviate slightly from "our muttons", it may be said in order to refresh our memories, that Doctor Rockwell was one of the pioneers in electrotherapeutics in this country. He had an uphill road to travel and, indeed, his claim to belong to the "regulars" was gravely questioned by certain great ones of his New York colleagues. However, this is by the way.

In the course of the last few years, the employment of intravenous injections for securing rapid results has received the approval of those in authority and we understand, through personal communications, that certain leading Chicago internists administer digitalin and other digitalis preparations in this manner.

The introduction, intravenously, of sodium iodide and sodium salicylate, as it is advocated by Dr. Albert C. Geyser, to whose article we referred in the preceding editorial, provides a highly acceptable means for putting the organism rapidly under the alterative and the antiseptic action of these sodium compounds. A few years ago, the intravenous injection of nuclein solution was praised highly in the treatment of tuberculous patients and, no doubt, with much justice, owing to the markedly increased phagocytic power that is a consequence of this treatment.

Among other acceptable and useful remedies that are put up safely for intravenous injection, we may name calcium iodide, which is prepared in combination with calcium guaicolsulphonate in Locke's solution (which contains sodium potassium and calcium salts in about the proportion found in the human body). Emetine has been given intravenously to advantage, while it manifests irritating properties when injected subcutaneously and has a nauseating effect when taken by mouth. Iron citrate, as well as sodium cacodylate, either singly or in combination, also represent excellent remedies for this mode of administration and a means by which their systemic effects can be assured far more promptly than if given by mouth; while the intravenous mode of injecting is less painful than the subcutaneous one. Quinine and urea hydrochloride which, introduced directly into the circulation, has been shown by Dr. S. Solis Cohen to destroy the pneumococcus in pneumonia and which is of great value in the treatment of malarial patients, is another remedy that is usefully administered intravenously.

On the other hand, there are some remedies that are readily absorbed through the mucous membranes and then rapidly diffused into the circulation and for which, therefore, the intravenous administration would be useless. Such a drug is particularly glonoin, and there are several others that are given with prompt results by mouth or, better, by sublingual administration.

It is, sometimes, a question not quite easy of solution what might prove the best mode of administering certain indicated and selected remedies in a given case. Other things being equal, we shall, naturally, determine first of all the question whether a remedy is desired for general systemic or for local effect. In the case of the former indication, the intravenous, subcutaneous, oral, sublingual and endermic methods of administration, even the rectal injection, may have to be considered. As we have seen, there are a few remedies that are absorbed readily when placed in contact with the mucous membranes of the mouth or of the stomach. Those, of course, do not require more elaborate methods of administration.

However, in the case of other remedies, absorption through the digestive tract not only is slow but may cause certain changes in the composition of the remedies that place them beyond our knowledge and make it difficult for us to control their action. In such an event, subcutaneous, intramuscular or intravenous injections will be selected. When the subcutaneous or intramuscular injection gives rise to painful swelling and if the injected remedies are absorbed too slowly from the site of injection, as is true, for instance, in the case of sodium cacodylate, also quinine preparations, the intravenous method will be that of selection.

It goes without saying that remedies intended for intravenous injection must be absolutely faultless and blameless as to sterility. They must be intrinsically suit-

able for rapid incorporation into the blood stream, and it is equally clear that substances tending to injure the blood cells would not be suitable at all for this mode of administration.

There are many factors to be considered in discussing the intravenous injection of remedial agents. However, as we are not writing a monograph but merely an editorial article, what we have said must suffice.

Speak without being afraid that the wind will carry away your words and sow them in fresh soils. —Zola

ANAPHYLACTIC SHOCK

In the last issue of Clinical Medicine (April, p. 268), Dr. J. H. Lowrey related an experience in a case of pneumonia in which he had injected a dose of pneumonia phylacogen, the injection being followed by an alarming degree of shock and prostration. Any physician that ever has witnessed anaphylactic shock (for, that is what it was) will sympathize with Doctor Lowrey in his wholehearted condemnation of the remedy employed.

However, while such a condemnation can be understood, it still may be questioned whether it is fully merited and justified.

Anaphylactic shock occurs, according to the first investigations on the subject, in persons or animals, sensitized by, and hypersensitive to, a certain proteid substance if this is introduced parenterally into the circulation; that is to say, by hypodermic, intramuscular or intravenous injection. It affords an explanation for certain serious and even fatal accidents after the injection of diphtheria antitoxin in patients who had received similar injections two weeks or longer, possibly several years, prior to the treatment.

Incidentally, it may be said that anaphylactic attacks, but which may not be sufficiently severe to amount to shock, are observed under numerous other conditions, notably in the case of certain instances of intolerance to foods, such as strawberries, tomatoes, eggs, milk, fish, and so forth.

As to the sensitization to the proteids of horse serum, as it is observed in a so-called serum disease after the administration of antidiphtheritic serum, antitetanic serum, and similar antitoxins, we call attention to Query 6181 (Clin. Med., 1916, p. 289) in which this question was discussed in some detail. According to Clinical Medicine for September, 1919, (p. 645), Prof. Ch. Richet, who introduced the term anaphylaxis into medical literature, and some coworkers announced that diluting the serum, to be injected in sensitive organisms, with nine times its volume of isotonic solution of sodium chloride provides a protection against the development of the anaphylactic reaction.

Phylacogens, said to be filtrates of bacterial cultures, are, of course, proteid substances and it is easily possible to meet with instances in which a certain organism, whether human or animal, is sensitive to the protein contained in a certain phylacogen. Whenever injections of proteid substances are made, one must reckon with the possibility—especially after repeated injections at intervals of more than ten days—that an anaphylactic reaction will occur. In order to guard against this accident, one may adopt either the method proposed by Professor Richet or that suggested, some years ago, by Professor Besredka, according to whom a minute quantity (one drop or so) of a given protein injected half an hour prior to the proper therapeutic dose will serve to desensitize the organism.

We are not in a position to pronounce definite judgment in this matter. The problems of anaphylaxis are far from being fully understood in all their phases. However, according to laboratory and clinical reports, it appears to be perfectly safe to administer repeated treatments with certain proteid substances, providing the necessary precautions are taken.

FREE TRADE

We have received a form letter and some circulars from the Free-Trade League, which is specifically urging medical journals to oppose legislation now pending in Congress for the imposition of duties on surgical instruments particularly, and also upon coaltar products, including dyestuffs and explosives.

We are opposed to this propaganda. Take surgical instruments, for instance. At the beginning of the war, we were dependent upon Germany almost absolutely for the essential instruments necessary to

equip our armies. It was only by almost superhuman effort that manufacturers of this country were able to secure the necessary supplies; and, as a matter of fact, thousands of surgeons never did receive the equipment they needed but were dependent upon their own private instruments for these essentials. Manufacturers spent thousands and thousands of dollars to meet the demand and, now, the demand on the part of the Free-Trade League is this, in effect: That all this equipment be scrapped and the manufacturers be left to "carry the bag," while the surgical-instruments trade is left to die. Of course, Germany will supply us!

The position as regards the coal-tar products is even more dangerous. If we let down the bars on importations of coal-tar products from foreign countries, and particularly, from Germany, it is almost inevitable that the chemical industry of America will be sacrificed. All that will escape will be the heavy chemicals on which America may be able to maintain its supremacy on account of the tremendous amount of raw materials here available. The dyes, medicinals and finer synthetics of all kinds will be taken over again by Germany.

That this is inevitable is shown by the report made to our War-Trade Board by the Reparations' Commission, of the enormous quantity of medicinal chemicals available in Germany for sale to the Allies. According to this report, the Allies have an option on medicinal chemicals having a value of 37,400,192,247 marks. The mark now is worth only a little more than one cent, but, even at present exchange, these chemicals are offered to us at about one-twentieth the price at which they can be sold in this country. To let in this flood, without restriction, necessarily means death to American chemicals. It means that every manufacturer will have to scrap his plant or transform it into a place for the manufacture of soft drinks, candy, Ouija boards or something else profitable.

The problem raised by the Free-Trade League is something more than disinterested idealism. It involves the permanence of certain great industries and the economic welfare of our entire country. Physicians, particularly, should be interested in this problem—especially those good Americans who are anxious to see their country capable of self-maintenance, prepared in every respect for self-defense.

I think it must somewhere be written that the virtues of mothers shall, occasionally, be visited on their children, as well as the sins of fathers.—Dickens.

"ABSENT TREATMENT"

We have come to it. Absent treatment no longer is a prerogative of the disciples of Mary Baker Eddy nor of those followers of the late John Alexander Dowie upon whom his mantle may have fallen; but, a Chicago physician, who is authorized to sign M. D. after his name, being a graduate of the Hahnemann Medical College (1877), circularizes physicians whom he assures that no part of his practice of psychotherapy has yielded more decisive results than that termed "absent treatment", and inviting physicians to make use of his help in the application of "volotherapy".

Fortunately for the physicians, he does not ask for any change in attendance or methods, but offers his aid as an adjunct to the usual treatment. Indeed, while he prefers to see obstinate cases once or twice, even this is not essential.

Mind is great, and Mary Baker Eddy and John Alexander Dowie, et al., are its prophets. We do not in the least hesitate to acknowledge the truth of the assertion of this Chicago physician that "mind cure has shown its value in all forms of disease." We appreciate his assurance that, if we call on him for help, he will protect our interests and will serve our clients at usual fees. We are impressed with the fact that he *prefers* to have the patients continue under the care of their regular physicians, and we admire his—(what shall we call it?) when he implores us not to class him with Christian Scientists and New Thoughters, since he uses "volotherapy—will-therapy—which is strictly scientific."

This good man has, according to his letter, under his care at present close to two hundred absent patients. If he gives to each patient an absent treatment requiring ten minutes, that means two thousand minutes, crowding thirty-three and a third hours into a ten-hour working day, or, perhaps, he works fourteen or fifteen hours a day as so many of us do. According to

that reckoning, he could give to each "absent" patient only about five minutes "at the usual fee". Pretty soft!

It doesn't seem necessary to comment on this latest vagary. Our C. S. friends get away with it, having carefully prepared the mental field of their clients. Nota bene, by personal contact. The late John Alexander Dowie also was hugely successful owing to the magnetic persuasiveness of his personality, and the blind, unreasoning faith of his—dupes.

Whether ——, M. D., of Chicago, will make this absent-treatment business a go, remains to be seen. For the present, we must confess that we are Thomas Thomasson, of Missouri.

I like the laughter that opens the lips and the heart—that shows at the same time pearls and the soul.—Victor Hugo.

IT OCCURS TO US THAT—

How much Wood would Woodrow chuck, if Woodrow could chuck Wood?

—

HCl has always played an important part in digesting the food we eat, but, in "this changing world," H. C. L. threatens to prevent us from getting anything to digest!

—

The poets' plaint "whither are we wending" has been fittingly answered by the builder of a said-to-be popular modern song, in his refrain: "Nobody knows and nobody seems to care."

—

Man, we are informed, was originally bisexual, but, owing to unfortunate circumstances over which he had no control, became divided and the subsequent "sex attraction" simply means that the long-separated portions endeavor to reunite themselves. Simple, isn't it? But isn't it a pity that the "right other half" is so hard to find? Many unite but few become units!

—

If one may judge from the pleasing odor of steeping humulus arising from about every third basement, there will be no immediate necessity for erecting a "Home for Indigent Hop-Growers."

—

An appropriate epitaph for our dear old friend, John Barleycorn, would be: "He is not dead but sleepeth." Encephalitis lethargica, probably.

—

If Modern Mary had a lamb,
She certainly would holler
Should each chop in its little frame
Not bring her half-a-dollar.

—

"Auto-Hemotherapy" is a wonderful thing. A drop or two of one's own blood, "potentized and processed"—according to the originator of the idea—will, when reinjected, so revivify the individual that "you'd be surprised." The anemic blush, the halt skip and the thin grow fat; also, the obese become sylphlike and the lazy work. After three shots, old maids go a-vamping and octogenarians sit up and take notice; hair grows where nothing was before while embarrassing patches thereof curl up and die. The stimulating effect of such injections upon the mental processes seems also to have been demonstrated: *vide* Hum-a-hem-a-therapy literature. But, then, some of us feed "partially predigested chicken bones" to demineralized patients.

—

What men usually ask for when they pray to God is, that two and two may not make four.

—

If prohibition has brought about such a millennium-like state of affairs as described in *American Medicine* (Feb., p. 82), in New York, where no more alcoholic patients encumber the hospital wards, rent collectors have no problem at all any longer, the rent always being forthcoming, grocers have no bills on their books, since customers are paying cash, nowadays, for everything they get—and if so much more money is being banked—all these things might be thought to contribute toward more tolerable living conditions.

Why then, we ask, why the constantly rising prices, the absence of living quarters and the excessive rents of those that are available? Why, with the increasing movement from farm to city, the advertising pages full of "Male help wanted" and "Female help wanted"? Why, in short, why this continuation of the same old mess; why, in fact—Oh, what's the use. It just occurred to us.

Leading Articles

French Mineral Springs and Climatic Health Resorts

By PAUL CARNOT, M. D., Paris, France

Professor of Therapeutics at the Faculty of Medicine of Paris

WHEN I talk to Americans who came to help us win the war, I do not need to appeal to your sympathy for France. You have given us an indelible proof by bringing us, not only, the decisive succor of your arms; but, likewise, most ardent and delicate care for our victims of the war; for our wounded, our consumptives, our children, your assistance was offered with a spontaneity and discretion that doubles the value of your favors.

Talking to Americans who have lived among us for many months, I have no further need to reveal to you the charms of our country, the mildness of her climate, the splendor of her skies, the harmony of her landscapes which by some sort of mimicry are reflected in the character of our race. In fact, I know that you have appreciated, as friends, the nature of the French country and, likewise, of the French soul.

Professor Paul Carnot.

But, because you are anxious to learn about the wealth of our French medical resources, before returning to free America, I shall outline in this conference all the beauties of our health resorts and all their therapeutic virtues. True, you already know some of them and have learned that, in surroundings that frequently are beautiful, our mineral springs and our climates have rendered great service during this war, not only to our sick but also to yours. Superior in many points to the resorts of Germany, our French places may expect to be preferred by our friends.

The Mineral Springs

I shall now speak about our mineral waters. One of their most remarkable qualities is, the great variety of their combinations, and, for this reason, the diversity of their therapeutic action. In the region of our country that is particularly favored in this respect are found, at the same time, alkaline waters, as in Vichy and in Vals, useful in treating disorders of the

[1]Report of a lecture given to American students at the Paris Medical School, June 3, 1919.

liver, dyspepsia, and diabetes; sulphate springs, renowned for their diuretic actions as also as baths, as in Vittel, in Centréxéville, in Evian, which are suitable for relieving the organism of the waste products of nutrition; sulphur springs, as in Aix-les-Bains, in Saint-Gervais; in the Alps, as in Luchon, in Cauterets or in Amélie-les-Bains in the Pyrenees, useful for treating rheumatism as well as skin diseases and pulmonary affections; finally, oligometallic, hyperthermic, and radioactive waters which carry the mysterious energies of the central earth fire, and which act as sedatives against all pains, be it neuralgias, like the waters of Néris; or colics as those of Plombières; pelvic troubles, as in Luxeuil; heart troubles, as in Bourbon-Lancy. We also have the chlorine waters of Salies-de Béarn and of Salins-du-Jura, the arsenic springs of La Bourboule, the magnesia waters of Chatel-Guyen, and the mineral springs, charged with carbonic acid, of Royat, and others. One can see that the different physical and chemical qualities of mineral waters and, in consequence, all therapeutic correctives can be found in our French resorts. Few countries, indeed, are endowed with such a wealth of mineral waters.

From this assortment of French health resorts, I shall select some of the best known for illustration.

Vichy

As a first example, I shall describe the watering place of Vichy, perhaps, the most famous health resort in the world, which is visited yearly by more than 100,000 patients. The waters of Vichy contain alkali amounting to an average of 5 Grams per litre. Some are hot, as the famous springs of Hôpital, of Chomel, or of the Grande Grille, while others are cold, as those of the Célestins. The treatment at Vichy consists, above all, in drinking the waters. It must be carefully graded, because it is possible to obtain very different reactions upon the same organs, according to the particular spring, the temperature of the water, the dose, and the time of ingestion.

The therapeutic indications are especially clear for three groups of affections which I shall discuss here:

1. Primarily belong here, the liver complaints, notably cholelithiasis: in cases of pronounced gallstone colic, with or without jaundice, of vesicular colic with languor, with local pains, or masked lithiasis which is especially characterized by dyspepsia, the Vichy cure is extremely useful. But, it seems that it must above all increase the strength of the bile duct rather than cause the violent expulsion of the stones. This cure must be conducted with great caution.

Other diseases of the liver are greatly alleviated by the Vichy treatment, as, for instance, cases of malarial or alcoholic liver affections or of congested, fatty, sclerotic liver, providing that the liver cells still are able to react to the therapeutic stimulant.

2. In the second place is to be mentioned diabetes. Vichy can be recommended to corpulent or gouty persons subject to diabetes who suffer from a moderate glycosuria without denutrition. Very often the sugar will decrease or disappear during the treatment and the improvement continues for a considerable time afterward. Many a sufferer from diabetes returns each year to spend a season in Vichy. However emaciated diabetes patients, with poor digestion and excessive sugar secretion and acidity, have small prospects of being benefited by this treatment.

3. In the third place, Vichy agrees with gastric troubles whatever may be their clinical type. For, with different methods of treatment, one can influence, variously, the principal troubles of gastric motility, sensibility and secretion. The dietetic system which is observed at the resort, the balneotherapeutic and the physiotherapeutic methods of treatment contribute to the good effects of the drinking cure. The life itself, at the resort, which is animated and brilliant, its social reputation, the contact with many patients who were already benefited by cures in previous years, all have an influence, by no means negligible, upon the psychic condition of the patient and contribute powerfully to his ultimate recovery.

Vichy has acquired great importance through the export of more than 30 million bottles of its water into all parts of the world.

Vittel and Centréxéville

As a second example of treatment through drinking mineral waters, I shall

cite "flushing" treatments, or diuretic cures, as they are practiced with the sulphated waters in Vittel or in Centrexéville in the Vosges Mountains, with waters containing only a small quantity of mineral substance, or in Evian on the shores of Lake Geneva. Here, the waters are consumed in large quantities and, rather, "for what they carry out than for what they carry in." Every morning, one has to take, gradually, every fifteen minutes, an increasing quantity of water, the patients walking around under the galleries or resting in a reclining position, according to their cases. The quantity of water absorbed is regulated in accordance with the amount of urine which is caused to be secreted by it. Soon, an elimination of uric acid takes place and, also, of the various waste products which polluted the organs and tissues. These cures are beneficial also to people suffering from uremia, lithiasis or chronic intoxication.

Aix-les-Bains

I shall describe, now, a treatment by external application, for instance, that for muscular rheumatism or articular rheumatism, as it is given at Aix-les-Bains, on the shores of the lake of Bourget, famous through Lamartine, with its Alpine panorama of snowcapped mountains. There, we find calcium-sulphide waters, with small mineral contents, but hyperthermal and of great abundance. The baths, the shower-bath massage, the sweating-bath play a great role. The skill of the masseurs, who knead energetically and loosen muscles and joints under a current of hot sulphur water, is one of the most successful characteristics of this cure.

In the Pyrenees

In the Pyrenees, there can be found, in wonderful valleys dominated by snow-covered mountains chains and intersected by charming rivers, a number of famous sulphur-baths. Bagnères de Luchon, the queen of the Pyrenees, receives patients afflicted with rheumatism, with skin diseases (especially with "weeping" eczema), with syphilis, with otorrhea, with laryngobronchitis; in fact with all complaints that are amenable to treatment with sulphur and to the invigorating climate of the mountains. To the drinking cure, are added fine spray-baths, vapor-baths, and others. According to the desirable therapeutic effect, there are applied strong and prolonged baths rich in monosulphide of sodium, or reduced and bleaching waters rich in sulphur and hyposulphite and, therefore, much softer. Barèges, lying at an altitude of 1,200 metres, is visited for the relief of the aftereffects of traumatism because of its strong waters as well as of its rugged climate. Cauterets, at an altitude of 930 metres, is particularly recommended against catarrh of the throat and of the respiratory passages. The waters of St. Lauveur have a good action upon the uterus and the ovaries. Amélie-les-Bains, a warm and well protected resort, can receive, during the entire year, patients afflicted with chronic bronchitis. All these watering places in the Pyrenees, situated in favorable localities, represent one of the most previous jewels of French balneology.

Thermic and Radioactive Springs

As a last instance, I shall describe a sufficiently homogenous group of hyperthermic and radioactive waters that render great services in cases of the different algias that so frequently are exceedingly difficult to relieve.

These waters have but few mineral constituents, but, they contain those miraculous forces that come from the fiery earth center. Among them, we shall mention the springs of Plombières, in the Vosges Mountains, which calm the pains and spasms of the intestines when administered as drinks, as intestinal douches, as baths and as sweat-baths. The nearby Luxeuil spring is good against congestion and allays pain in uterus and the ovaries. Néris water, on the other hand, has a sedative value enhanced by the mode of application (notably by prolonged baths) and the beautiful climate. There, are cured erethistic and painful nervous troubles: the neuralgias and, especially, those of the visceral nerves. Bourbon-Lancy water relieves rheumatic pains due from colds and has a powerfully soothing action in cases of irritation of the heart.

From these different illustrations, it can be seen how manifold are the principal French resorts, in their employment and their indications, and how numerous the classes of patients are whom they can serve. Their equipments, their facilities for recreation, their food, the life that one leads there "à la française" make them

agreeable and useful, for the patients as well as for their attendants.

Climatic Resorts

Our climatic resorts likewise are numerous and comply with many clinical demands.

1. Washed by three different oceans, France has various sea climates of great dissimilarity, some invigorating and stimulating, exposed to sea storms and heavy rains, as along the North Sea and the Bay of Gascogne, and others mild and restful along the shores of the tideless Mediterranean among the flowers of the sunny South.

2. The climates of the open country are represented by the beautiful valleys of Touraine, Burgundy or Gascogne, situated among gardens and rich vineyards.

3. Finally, are to be mentioned the mountain climates which extend up to the peaks, in the central plateau in the heart of our country, or in the Alps, the Pyrenees, the Vosges or the Jura which form the country's boundaries. No country in the world offers geographical conditions that are so favorable for climatic cures.

Let us make clear the qualities of our best known climatic resorts, by means of some illustrations:

On the North Sea is situated the beautiful district of Berck, in a strongly stimulating climate, forming a splendid health resort for patients with surgical tuberculosis; upon the sand of the district, move about, in small carriages drawn by donkeys, the poor children who are afflicted with Pott's disease or with coxalgia, refreshed by the air from the open sea, by the drops of salt water and by the actinic sun rays which tan their skin. On the western coast, we have Biarritz, the meeting place of the elegant world, where also abound the strong chlorine springs of Briscous; Hendaye where the little scrophulous patients of Paris are wonderfully improved; Arcachon, situated at the bottom of its basin, behind its dunes and forests, offers to consumptives a milder but very tonic climate. Its open-air cures are taken in boats or on the sand of the shore or on the dunes amid the pine trees. In the same region of the Pyrenees, but at a distance from the ocean, lies Pau, skirted by the mountains, with a humid and soothing climate beneficial to cases with erethistic symptoms accompanied by fever and hemoptysis. Similarly, Cambe, in the charming Basc country, is to be recommended to patients whose pulmonary symptoms need watching.

Finally, along the shores of the Mediterranean, which is a warm and sunny ocean, without tide, follow each other the famous resorts of the sunlit shore. Here, come, in winter and spring, the delicate persons of the entire world, the convalescents, the nervous, the old people, who escape the cold and the fogs and are happy to find, in a beautiful setting, the sky and the blue sea, the radiant sun hugging the red rocks of Estérel which are covered by sombre pines, or the palm and rose gardens. The sweetness of the climate, the warmth, the radiation of the sun, the fragrance of the flowers make of this corner of the earth a choice spot for the sick who wish to keep themselves in a hothouse.

Our beautiful resorts in Algiers, Alger and Biskra, offer still more heat and sunshine.

The French health resorts, in high altitudes, also, are numerous and vary in their therapeutic indications. For instance, in the Auvergne we can find among the Puys and the ancient volcanoes representatives of tonic and vivifying resorts in Royat, Vic-sur-Cère, Bourboule (850 metres), upon Mont Dore (1,050 metres), on the Lieran (1,150 metres), all in superb localities.

In the Pyrenees, there rise successively the resorts of Luz-St.-Sauveur, of Cauterets (980 metres), of Barèges (1,250 metres), of Font-Romeu (1,200 metres), of Escaldas (1,300 metres), of Super-Bagnères (1,800 metres).

In the Alps, are found St. Gervais at 800 metres and St. Gervais-Motivon at 1,200 metres, Chamonix at 1,050, Les Voirons at 1,400 metres, Pralegna (1,425 metres), Le Revard at 1,500 metres and, in case the roughness of the glaciers and peaks is not feared, La Grave and the Lautaret at an altitude of more than 2,000 metres.

Near the Mediterranean, we have Thorenc at an elevation of 1,200 metres, and Peira-Cava (1,581 metres), which are summer resorts and particularly visited by those who spend the winter at the Riviera.

These health resorts in high altitude are especially destined for convalescents, for

weak persons who easily react to the tonic and invigorating mountain climate, for anemic persons who are able to benefit from the increase of red corpuscles caused by the atmospheric depression of high altitudes, and for individuals who can be helped by the heliotherapeutic qualities of an air which is pure and permits the passage of a great number of actinic rays. The sight of the great panoramas, of snow-covered peaks and glaciers, the quiet life, also influence strongly the morale of the patients, conditions which are essential in so many climatic cures.

A Vocational School for The Tuberculous

By JOHN DILL ROBERTSON, M. D., Chicago, Illinois

Commissioner of Health of Chicago.

EDITORIAL COMMENT.—Vocational, or occupational therapy is one of the latest developments in the treatment of patients afflicted with chronic diseases. We say advisedly, the treatment of patients, and, not, the treatment of chronic diseases. For, here, more even than in other circumstances, it is highly inexpedient to consider the malady before the patient. It always requires first consideration to be paid to the patient who has this disease. Vocational, or occupational, treatment, when adapted and suited to the individual patient, has been found a godsend to many and a potent means whereby other therapeutic measures became increasingly successful.

FOR many years, the treatment prescribed for tuberculosis was, complete rest and fattening foods. The sanatoria insisted upon the patient's sitting still or lying still all of the time. They fed him quantities of milk and eggs and, for a while, it was generally believed that this treatment had solved the tuberculosis problem. The patients made amazing gains in weight and it was assumed that every gain in weight meant a corresponding gain in resistance to disease.

Time proved, however, that such was not the case. When these patients left the institutions and returned to active life, one of two things happened in the great majority of cases. Either they reactivated their disease or they soon succumbed to some other disease because of their lack of resistance to contagions or infections.

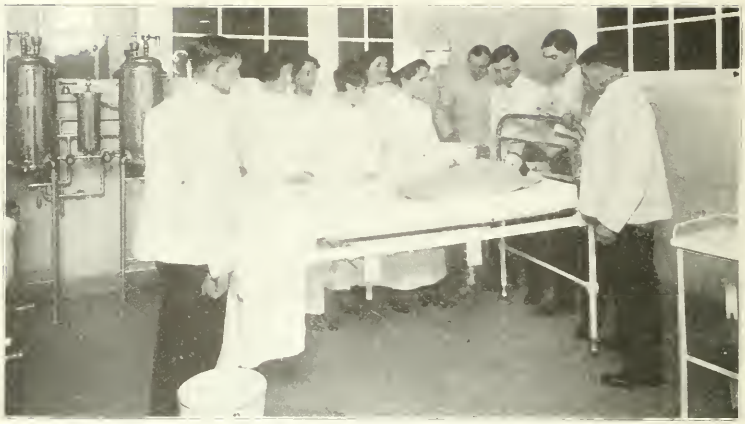
Some sixty years ago, Herman Brehmer included graduated exercise in his treatment of tuberculosis. Recently, Dr. Paterson, of Frimley, England, tried out a system of graduated labor with his patients, most of whom were from wealthy families. He had them carry stones from one place to another and back again, carry a basket of earth back and forth, and do similar things, the effort being carefully regulated. Dr. Paterson found that the exercise stimulated the cells of the body to create antibodies that were antagonistic to the tubercle bacillus and to the products of its metabolism. He found, too, that exercise gave rise to deeper breathing and gave tone to muscles and blood vessels.

Occupational Training

Dr. Edward S. McSweeny, of the New York State Department of Health, decided that, properly selected, useful work would be just as beneficial as carrying stones or baskets of earth from one place to another. While he was superintendent of the Otisville Sanatorium, he worked out a system defining some sixty occupations to which patients were assigned in work units under the supervision of the attending physicians.

Now, most of the sanatoria of the country have instituted a program either of graduated labor or of graduated exercise. The results, so far, indicate that the majority of cases, arrested by means of treatment that includes graduated labor or graduated exercise during the interval following the febrile stage, are likely to remain quiescent as long as the patient adheres to a common-sense program of living, while a case arrested by means of the absolute-rest treatment is more likely to become reactivated when the patient leaves the sanatorium.

In 1917, the directors of the Municipal Tuberculosis Sanitarium of the City of



Teaching the Undergraduate Nurses' Class

Chicago instituted a system of graduated labor. They began by having those patients who were living in the cottages take care of their own quarters. It soon was evident that the discovery, that they could do a little actual work (no patient worked more than two hours a day) without physical injury to themselves, cheered them tremendously and materially assisted in their cure.

The Vocational School in the Chicago Institution

In 1918, the directors of the sanatorium established a vocational school at the institution, in the hope that the interest of studying a subject, that would enable them to be self-supporting after their return to the outside world, would furnish to the patients an incentive to get well. People suffering from tuberculosis are naturally inclined to be melancholy and the attending physicians work under great difficulties in attempting to cure them unless they supply them with some strong incentive to get well.

The school started out with classes in dressmaking, tailoring, and dietetics. These courses were opened, first, because they required no equipment other than that already on the sanatorium grounds. The classes in dressmaking and tailoring found material for their work in the roomful of slightly worn clothing collected for the use of needy patients by the Service League. The class in dietetics found plenty of work in the diet kitchens of the sanatorium.

Very soon, the directors secured telegraph equipment and installed an instructor. The telegraph companies promised to give employment to all who finished the course and the railroads promised to place those that desired positions in those parts of Colorado, Arizona, New Mexico, and Southern California that are considered particularly beneficial to tuberculous persons.

About the same time, a course in typewriting and stenography was started. It soon became evident that both, this course and the one in telegraphy, were courses that only the young could master.

Good Psychic Effects

Two courses that contribute greatly to the morale of the patient-body are, the courses in barbering and in beauty culture. The pupils in these classes get their necessary practice in work on the patients. It is easy for anyone to realize the value to the pupil of learning such lucrative and comparatively easy work as these two vocations offer, but, only a psychologist can properly appreciate the value of their ministrations to the other patients. Any patient who wants his hair cut or who wants a shave can get it free at the bar-

Busy Student Carpenters

ber shop. Any woman patient who wants her hair shampooed, or her nails manicured, or her face massaged can get the desired service for nothing at the beauty shop. In addition to the work in the shops, both of these departments send their students into the wards to minister to the bedfast patients. There is nothing that will put so much heart into a bedfast patient as a little beautifying, whether by means of massaging, hairdressing, manicuring, shaving or haircutting.

All work done in the school is under the direct supervision of the attending staff of physicians. They decide when the disease has reached such a stage that it is safe for the patient to depart from the absolute-rest treatment; for, absolute rest still is believed necessary during the febrile stage of the disease. They determine the number of hours that a patient may study, and they keep close watch of each student to determine whether the course is benefitting him or not. Naturally, vocational therapy is a strictly individualistic matter.

Each prospective student has the advice of the director of the school and of the staff of vocational-school instructors as to what course he can take up most advantageously. If he tries a course and finds that he cannot adapt himself to that particular work, he is allowed to transfer to another course. If the physicians feel that his previous employment was such that he can return to it after he leaves the sanatorium, without danger of reactivating his disease, he is encouraged to take up some work that will interest him as a hobby.

Advantages of Such Training

Because of the great number of tuberculous persons in Chicago and because of the time and expense incident to a cure, our idea is, rather, to protect others from infection than to cure all those afflicted. Nevertheless, our treatment does result in a cure in virtually all of those cases that we receive in the early stages of the disease. The average length of stay in our sanatorium for those whose cases are arrested is at least seven months and, this being the case, there is sufficient time for a patient to learn a trade, such as tailoring, barbering, carpentering, telegraphy, and so on, while being treated for his disease.

During the short time that our vocational school has been in existence, there have been cases where patients left the sanatorium better prepared to make a living than they were when they entered. The barber school has graduated six men, one of whom had been a hod-carrier, another a janitor, and another a day laborer. These men are now able to make from fifteen to twenty dollars per week by working two evenings a week and Saturdays.

For the man of exceptional ability, there are courses in pharmacy, photography, x-ray work, electricity, routine laboratory work, and other occupations.

For the children, there are the regular school subjects, as well as, toymaking, rug making and such like.

For the bedfast, there are, rug making

and various similar occupations requiring little exertion.

The Vocational School does not spend all of its energies upon those that can be returned to the regular life of the community. There are some cases of tuberculosis admitted to the sanatorium, in ad-

Main Office.

vanced stages, where the patients remain positive-sputum cases. It is not safe for these patients to go out into the city where they are a menace to the health of thousands of people that may come into contact with them at work, on the streets, in the street cars, and elsewhere. This, however, is no reason why these persons should be condemned to a life of uselessness that will so depress them as to hasten their deaths. One such case recently graduated

"Next!" In the Barber Shop.

from the barbering school and secured a paying position as barber to the tuberculous patients of the Cook County Hospital.

Courses Now Offered

We intend to continue adding to our curriculum which, at present, includes the following subjects: Laboratory technic, pharmacy, x-ray, photography, nursing, domestic science, English, commercial training, telegraphy, electricity, agriculture and horticulture, woodworking, sewing, tailoring, beauty work, barbering and cobbling.

The work in English is under the charge of the public-school teachers and comprises the regular work of the city schools, except for the adult classes, which are given training that is intended, primarily, to enable them to take Civil-Service examinations. Much of the work of these classes is, however, devoted to preparing the foreign-born to enter other classes in the voca-

X-Ray Lecture and Demonstration.

tional school from which their ignorance of the English language now debars them.

The training in pharmacy is given in the sanatorium drugroom and is similar to the apprentice training under any registered pharmacist, except for the fact that the great quantities of medicine being mixed in our drugroom make it possible

Teaching Plain English.

for the apprentice to secure more practice in that sort of work than he could obtain in a regular drugstore.

The training in laboratory technic is given in our sanatorium laboratory. It consists of both, theoretical and practical

work, and those becoming proficient in it are placed on the sanatorium payroll.

The work in x-ray and photography is given in our x-ray laboratory.

The course in nursing is a six-months' course, consisting of lectures, demonstrations and actual work. It is designed as a short course to fit students specially for nursing tuberculous patients, and the proficient pupils are placed on the sanatorium payroll.

The work in domestic science is given in our regular kitchens and diet kitchens. It covers the preparation of food for both, the sick and the well. It includes also a study of food values and of dietetics generally.

The course in commercial training follows closely the course taught in high-schools and in regular commercial schools.

The course in telegraphy is made up of theoretical instruction followed by actual work in sending and receiving messages over the system of wires that connects the various buildings on the sanatorium grounds. When students in this subject become proficient, they are employed by the telegraph companies as soon as their attending physicians pronounce them able, physically, to leave the institution.

The course in electricity is given in our sanatorium power-house by our electrician. It includes both theoretical and practical work.

The courses in agriculture and horticulture are given by our sanatorium gardener and comprise both theoretical and practical work.

The courses in woodworking, sewing, tailoring, beauty work, barbering and cobbling are given in rooms fitted up as regular shops for the particular work that is being done. The classes are in charge of

Students Working in Drug Room.

skilled workmen and the instruction differs little from that of an appentice learning the trade anywhere else in the city. The only difference is in the added amount of theoretical instruction that we try to give the pupils.

Mickie O'Neil

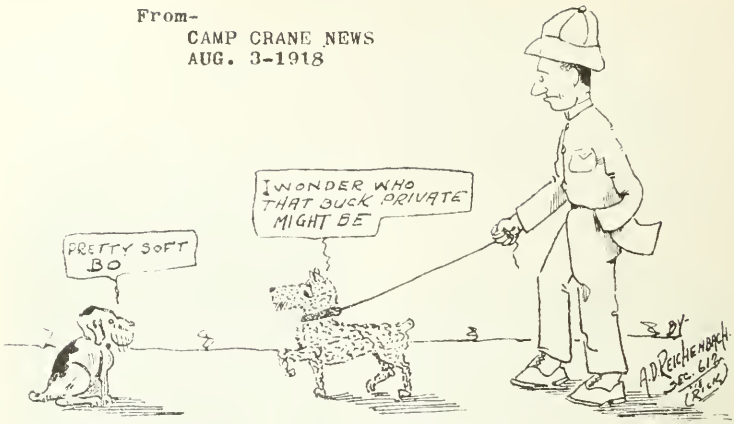
By RICHARD SLEE, M. D., Swiftwater, Pennsylvania

Colonel, M. R. C., U. S. Army, Lately Commanding Camp Crane, Allentown, Pennsylvania

EDITORIAL COMMENT.—The story told in the following is that of a dog and, for that very reason, it appeals to us. In addition to its "dog" interest (which we strongly are tempted to call "human" interest), Doctor Slee's account contains a clinical report of practical import. The manner in which Mickie was relieved of his calculi, and the beautiful way in which hyoscine and morphine, with cactin, kept him free from pain, carry a lesson to the physician, both in human and in veterinary practice, that it may be well to keep in mind.

We should like to see Mickie and make his acquaintance. We always liked dogs and Mickie seems to be a very discerning and, indeed, a quite remarkable "person."

MICKIE O'NEIL is a scrappy, four-year old, thoroughbred Irish terrier, and has been our constant companion since he was six weeks old. During the two years that I was on duty at Camp Crane, he spent most of his day hours with me or about the camp. His great joy was, the soldier. He worshipped the uniform. I was constantly in hot water, as the little rascal seemed to feel that every young man should be in O. D. or khaki, and he had an especial antipathy for the man that could be picked as a slacker. He hated the Hun. Don't ask me how he knew. The instinct of a dog is the only answer. He vociferously objected to this type of



As the soldier saw "MICKIE"

individual entering Camp; nor would he allow one of these to come near my tent when in the field. He resented it to my cost, making it necessary for me to supply new pants and, in one case, a new overcoat to the objects of his dis'ike.

We had been in camp several months when he was run over by a "Tin Lizzie", the rear wheel passing over his abdomen. As a result, there occurred a profuse hemorrhage from bowel and bladder, which persisted for several weeks and during which time he refused food and drank but little water. At the end of about three weeks, he began to crawl around, practically a bag of bones, but, he rapidly regained strength and flesh, and finished his enlistment with flying colors, having licked, or had a drawn battle with, every dog in camp; and, their name was legion.

The Clinical History

We now jump to October, 1919, when we noticed that the little chap showed signs of discomfort, evidenced by continuous attempts at scratching his back over the lumbar region and biting his loins as a dog will do when infested with fleas; although he was free from vermin.

About the middle of October, he showed marked difficulty in urinating, and, after a week, there was complete suppression. A few hours of this, and I called Doctor Gregory, our veterinarian, who administered a dose of hyoscine and morphine, with cactin, and we catheterized the dog, obtaining about one-half pint of urine. The question of diagnosis was discussed; mine being, stricture as a result of his injury, while Doctor Gregory believed that there was a bladder stone. It was necessary to catheterize Mickie, night and day, every two or three hours for over a week; then, immediately following an injection of boric acid, his trouble ceased and he was apparently well for a week. However, again, there occurred retention followed by another week of catheterization. In all, there were five or six attacks of this trouble.

While on a visit in Allentown, I had Mickie examined by Doctor Blank, who failed to find a stone, but did find a very much engorged prostate; at this time, he had marked enlargement of the scrotum, which ruptured spontaneously a few days later, discharging clear serum, to his great relief. Several days later, on withdrawing the catheter, two small concretions were discharged, each about the size of small grape seeds, and again he was all O. K. for about a week. But, once more, there followed a complete retention of urine.

Calculi Found

At this time, January 7, 1920, I substituted a bougie for a catheter, and could

The Author's Calculus Extractor

distinctly feel a roughness along the urethral canal, about eight inches above the meatus. By gentle manipulation, I was able to coax this body down several inches, when it lodged. I concluded that he had a rough stone in the canal; the question being, its removal. Among my tools was a long uterine probe and, near to its point, I melted a drop of solder; not entirely around it, but, to one side. I then filed the rear of this solder to a straight edge, as indicated in the sketch. My idea was, that the tip of this instrument would readily slip past the stone, while the broad side would hold it on withdrawal. I then gave Mickie four ½-strength tablets of hyoscine and morphine with cactin, by hypodermic injection, and started to work. After a few moments of gentle probing, on withdrawing the sound, I secured a good-sized stone, and, in the course of about forty-five minutes, I was able to remove twelve stones varying in size from a mustard seed to that of a grape pit. A thorough washing out with zinc sulphate and permanganate solution followed, and Mickie was himself for a week. Another dose of the narcotic, and two more stones; another week and one stone recovered; then, one slight attack relieved by simply passing the bougie.

At this writing, Mickie has been free from all trouble for about twelve weeks. It was interesting to note that there was little or no infection of the urinary tract, although I catheterized or scraped his urethra probably 150 times. I began by sterilizing the catheter, but, soon gave it up and depended upon thorough washing.

Canine Wisdom

I was much impressed by the reasoning of the little chap. Whenever his bladder began to trouble him, he would come to me for relief. He always has slept on the foot of my cot, or bed, and he would wake me, generally at about 1 a. m. and at 4 or 5 a. m. to be catheterized. It never was necessary to tie his mouth; nor to restrain him, beyond having some one pat his head; indeed, frequently I did it without any aid. When relieved, he would hop back, curl up and go to sleep.

This is the medical history of a little four-footed veteran. He is known to many of your readers who were stationed at

Mickie and the Colonel.

Camp Crane at one time or another and with whom he made friends. I have heard of several similar cases, recently, where the dog was destroyed to end his suffering. So, in reporting this case in detail, I hope that it may save someone's else most loyal of all companions.

It also is another proof of the value of hyoscine and morphine with cactin. At no time, was the little fellow entirely unconscious, and, as soon as I completed my fishing expeditions, he would, upon command, empty his bladder into which I, then, usually injected 40 or 50 mils of a 2-per-cent boric-acid solution.

Intravenous Injections

A Résumé of 1343 Intravenous Injections During the Year 1919

By ALBERT C. GEYSER, M. D., New York City

Consultant to the Nazareth Trade School, Farmingdale, L. I.; Radiographer to the Huntington Hospital of Huntington, L. I.

EDITORIAL COMMENT.—Doctor Geyser confidently asserts that the method of intravenous injections of potent remedies is not dangerous. This is in contradiction to the claims of some practising physicians. However, we are strongly inclined to side with Doctor Geyser, having been assured, by other men deserving of confidence, that this convenient and prompt method of treatment is quite safe, providing that all necessary precautions are taken. There can be no doubt about the desirability of getting certain remedies directly into the circulation. That is a self-evident proposition.

IT is an admitted fact that every drug intended for constitutional effect, when administered by mouth, must be absorbed and enter the general circulation. Uncertain and irregular results, in addition to gastric disturbances, have long suggested the desirability of placing remedies directly into the circulation. When, therefore, a few years ago, there were offered, by a New York laboratory, solutions of drugs that could be safely injected directly into the blood stream, a new era of therapeutics was opened up. Since then, the progress in the making and the use of these "intravenous" medicaments have gone ahead with leaps and bounds, many new drugs and compounds having been added to the list.

Salvarsan was the pioneer, the advance guard. That salvarsan did not accomplish all that was originally intended for it, was due to the fact that we believed, at the time, that the arsenical compound possessed a direct sterilizing effect on the tissue, that salvarsan was a spirocheticide. We know now that that was an error. We have since learned that all arsenical compounds act by stimulating the physiological activity of the body cells to an antispirochetal action.

Intravenous Injections Safe

The superiority of the intravenous method of administering salvarsan over the intramuscular method, was so evident that the latter has practically been abandoned. Several years of experience with several thousand intravenous administrations of various standard remedies permit me to state that, when solutions are properly prepared, it is a safe and practical procedure. There is greater tolerance for various remedies, since even large doses fail to provoke undesirable disturbances, as they do when given by mouth. The method is more scientific, for the reason that it affords opportunity for more accurate observation of the responses of physiological processes, while the results are positively more certain and uniform.

Resistance to Disease is a Physiological Process

To prevent a disease from taking hold of the body, is a physiological process; likewise, to overcome the effects of a disease after it has invaded the system, is a physiological process. In the first instance, physiology produces immunity, while, in the second, the same physiology brings about recovery. The elements for the immunity, on the one hand, or the recovery, on the other, in the final analysis, will be found in the blood stream.

We are, today, in the midst of a most intensive effort to develop scientific knowledge concerning the two most interesting phases of medicine, namely, the processes of infection and immunity. Without the conquering of these two, prophylaxis will be almost impossible.

Much light has already been shed upon the physiological function of the leukocytes, much more is anticipated concerning the function of the erythrocytes. That the function of the red cells does not end with merely carrying oxygen to the cellular elements, has long been suspected; we are beginning to understand the role of the red cell in fever. There can be no heat without combustion, no combustion without oxygen; there can be no oxygen in the tissues unless carried there by the red cell. There also is much evidence that this activity frequently results in the destruction of great numbers of red cells and, in ex-

treme cases, this destruction is occasionally manifested by the symptoms of jaundice. The more active the process of combustion, the greater the destruction of the red corpuscles. One of the first manifestations, either before or during the acute invasion of an infection, is, anemia. Sometimes, this anemia precedes the infection and then it is the result of an overabundance of retained nitrogenous compounds. These compounds must be oxidized, which can be done only by the red cell. The infective agent is immediately combated by a process of oxidation resulting in the never-varying rule of the acute-disease processes being ushered in by fever and chills. The explanation of the chill and the fever is beautifully illustrated during an attack of malaria. A blood slide taken at the various periods tells a most interesting story; it explains at once why the fever, the chill, the sweat, and then the quiescent period.

It is not my intention to dwell upon the theory of the blood functions. (See "Erythrocytes and Leukocytes during Health and Disease" by Geyser, *N. Y. Med. Jour.* June 7, 1919; "The Treatment of the Anemia in Chronic Ailments" by Geyser; *N. Y. Med. Jour.* Feb. 15, 1919.) On the contrary, I wish to present the clinical side of a large number of intravenous administrations. The smallest number of injections given with satisfactory results was two. In several of the cases of influenza complicated by lobar and bronchial pneumonia, the crisis came on after the second injection of sodium salicylate and iodide.

Illustrative Cases.

Case 1. Male patient, about 60 years, blacksmith, was taken sick with the usual symptoms of influenza. During the second week of the attack, bronchopneumonia developed. This refused to yield to the usual remedies as administered by the family physician, Doctor Shea. At the end of the third week, I was called in. Mr. O. was then *in extremis*. His face was markedly cyanotic; pulse, 120; respiration, 36; the cough was most distressing, allowing no time for rest. The mucus was dry and very tenacious. All oral medication was stopped excepting hydrochloric acid and pepsin. An intravenous injection was given, of 20 mils containing sodium salicylate and iodide. Within thirty minutes, the mucus was thinner and could be expectorated with less effort. Twenty-four hours later, the same dose was repeated. Some time during that night, the patient broke out in a most profuse perspiration, the temperature being 103 degrees Fahrenheit. From that time on, there was steady improvement until complete recovery, ten days later.

In some similar cases, four injections have produced similar results. I saw but one case where six injections seemed necessary, each injection being given eight hours after the preceding one. Although in a serious condition for nearly a week, the patient made an uneventful recovery.

The greatest number of injections of sodium iodide, following arsenophenamine and mercury in syphilis, were, one per week during the entire year of 1919; the patient in question thus received fifty-two injections and with gratifying results.

I cite these instances merely to call attention to the fact that, in acute cases, the intravenous route offers quick and direct results from a few doses, while, in the more chronic states of diseases, it may be employed for months and years without ill consequences.

Eight institutional cases of asthma in the aged were treated by intravenous injections of sodium iodide, 20 mils containing 2 Gm. (31 grains) of the drug. The relief usually was very prompt; a complete recovery, however, required from 12 to 16 injections; they should be given every other day.

Case 2. Mr. S., age 61, cabinet maker, was apparently perfectly well excepting for asthmatic attacks occurring every few days. All the usual remedies had been tried for the past twelve years. Every time that the weather changed or that the patient suddenly went from a warm to a cold atmosphere, an attack would come on. In February, 1919, this patient came under my observation. The diagnosis was, bronchial asthma. He was put on treatment by intravenous injection. Six injections were given during the next two weeks; beginning with March, two injections per week for three weeks. Unavoidably, no injections were made during the last week in March but, in spite of this, no more attacks occurred. In April, one injection per week sufficed, and, since that time, there has not been a single attack of asthma in

this case. This patient has a hypersensitive respiratory apparatus; even now, tobacco smoke or dust bring an excessive sneezing and coughing; however, there is no more asthma.

Case 3. Mr. A., business man, has periodic attacks of brachial neuralgia. Electricity, massage, baking, even osteopathy, had failed to relieve. This patient was referred by Dr. Merrill of Brooklyn. Intravenous injections of sodium iodide 20 mils (31 gr.), was given twice weekly. After the fourth injection, the patient was entirely free from all pain, freedom of motion was perfect. The injections were continued, however, until six more had been given. Recovery then was perfect and, so far has been permanent.

Case 4. For the past two years, this patient, female, age 35, had lost complete control of her voice, speaking above a mere whisper being impossible. All kinds of diagnoses had been made ranging from hysteria to syphilis. The Wassermann test was negative. Besides the loss of voice, there was noticeable a marked anemia, yet, the patient was above her normal weight. Two injections of iron and arsenic were given per week for two weeks, then changed to sodium iodide 20 mils (31 gr.) for two weeks, after which the treatments were reduced to one intravenous injection per week. After the third sodium-iodide treatment, the voice returned and it has remained normal since then.

Case 5. Mr. F., collector, age 48, has been troubled with weak throat for the past five or six years. The pharynx appears red, congested, and lined with a heavy, ropy mucus. Clinically, the throat condition suggested a specific origin. The Wassermann reaction was negative. This patient had a low blood count of only 4,300,000 red cells. Sodium iodide was given in full 20-mils (31 gr.) doses; after six weeks, the throat assumed a change for the better. The patient was able to be out in the coldest weather, during the fall of 1919, without any inconvenience. For the sake of safety and appreciation, the patient volunteered to continue the intravenous treatment periodically.

Case 6. Patient C., a convent sister, in 1918, complained of facial neuralgia. Attacks would come and go; they were very severe and, as a result, she lost much weight and became anemic. In 1919, an x-ray showed an abscess at the root of the eye-tooth. This was removed and the neuralgia ceased at once. In the meantime the patient had become so weak that she developed fainting spells. Six injections of iron and arsenic increased the blood count by 1,000,000. The fainting spells ceased and she has remained well.

Results Generally Beneficial

In this résumé, I shall make no special reference to the intravenous treatment of syphilis nor to the treatment of the secondary anemias following the infectious diseases. The results in these cases have been so prompt and so efficient that they do not require repetition. The principal reason for this résumé is, to call attention to the use of the intravenous route for administering such drugs as sodium iodide, alone, or sodium salicylate and sodium iodide in combination. These two drugs are almost specific in all cases where the general system is suffering from the retention of nitrogenous compounds. The simple reduction, oxidation and elimination from the economy of these substances proves of material value in raising the natural immunity to infections of all kinds.

Sodium salicylate and iodide have proven veritable specifics during the influenza epidemic. Another reason for this résumé, is, to show that, even in patients having received many injections intravenously, no untoward results have been manifested. If the technic is correct and the drugs are suitable, the results are ideal. It goes, of course, without saying, that such measures as hygiene, diet, psychotherapy, and such, are not to be neglected. Intravenous medication is not a cure-all, but, if the same drugs are really indicated to be taken by mouth, there is no comparison between the two methods.

Facts Definitely Known Regarding Drug-Addiction Disease

By ROBERT H. CHILTON, M. D., Norfolk, Virginia

EDITORIAL COMMENT.—Doctor Chilton's insistence upon the fact that drug addiction, more particularly morphine addiction, is a disease and, not, a vice, can not be supported too emphatically. The victims of morphine addiction are condemned altogether too frequently and are treated, often, slightingly and with an entirely undeserved decree of impatience. The résumé of what has been established regarding this disease is interesting and, undoubtedly, will prove of service to many physicians.

PRIOR to the enactment of the Harrison legislation, virtually nothing definite was known to the medical profession regarding either the mechanism of, or the treatment for, drug-addiction disease. Bishop and a few others, including Frank Fenwick Young, thought, contrary to popular belief, that this disease is based on some physical disorder rather than being due to mental or moral depravity. He asserted that the great majority of the morphine-addicts are among the better and moral classes, that not less than 50 percent of those suffering from drug-addiction disease are leading useful lives, and that not a few are prominent men and women unsuspected of being addicts. This applies more correctly to those who, through experience and self analysis of their malady, have reached that stage of proper regulation of the daily amount taken, that is required to keep them in balance, neither indulging in sufficient quantity to produce narcotism nor less than is necessary to keep them in their normal state of activity and physical well being.

Although the writings of many, who have attempted to investigate this disease, are actually chaotic in the many and varying opinions expressed, most of which are totally incompatible with the clinical indications, and while most of the textbook teachings on the subject are useless because of the fact that they still cling to the moral-degeneracy idea, certain definite facts are now established concerning this distressing disease.

In his recent work published this year, Bishop has so clearly demonstrated that this disorder is essentially a physical disease, that it is impossible to add anything further to his findings. It might be interesting, though, to consider the facts that have either wholly or in part been established concerning drug-addiction disease.

Morphine Addiction Differs from Other Addictions

The first thing necessary in considering these data is, to clearly understand that these fundamental data for a future complete knowledge regarding the exact nature of drug-addiction disease apply to morphine addiction, and that the users of cocaine, heroin, cannabis, and similar drugs do not fall under the same category. It cannot be denied that users of the latter drugs are essentially depraved morally and mentally, or that they will become so, from their effects. Therefore, these facts apply rather to the morphine user, leaving the study and understanding of the mechanism of addiction to cocaine and kindred drugs to future research.

Research into the causes of the symptoms that develop, when sudden withdrawal takes place, seem to point clearly to the manufacture, within the body, of a definite chemical compound, most probably formed in the liver, which acts primarily as an antidote against the large doses taken by the addict, but, which, in the absence of the addiction drug, is the direct cause, plus the autointoxication, of the withdrawal signs and symptoms. Confirmatory of this view, is the fact that the degree of suffering is in direct proportion to the quantity of the addiction drug that is withdrawn.

No Specific Cure Available

No specific has been discovered for the cure of this disease, despite the widely advertised "cures", all of which are based either on gradual withdrawal or sudden withdrawal with the substitution of other drugs, principally those derived from hyoscamus, but, none of which have been

found to be specifics. On the contrary, they produce, in the large majority of cases, dangerous conditions in the victim of such "treatment," the patient being left in a state of physical exhaustion, accompanied by violent sneezing, pain of severe degree in the long bones and in the back, with an entire incapacity for any effort, either mental or physical, and, in most cases, highly hysterical.

The gradual-withdrawal method of treatment, in the majority of cases, is a slow form of torture allowing the establishment of a gradually-acquired state of nervous shock that is rarely recovered from. Because of the lack of sufficient energy to work and make a living, many patients treated by this method, are forced to return to drug-use in order to regain a normal balance whereby they will be able to resume the burden of self support.

Individual Treatment Called For

Since there is no specific and no routine method of treatment that will fit all cases, each case, being a law unto itself, requires careful study of the symptoms and an appraisal of the physical state, individually, before any thought is given to the final withdrawal of the addiction drug, treatment having, first, to be directed along the lines of a thorough upbuilding of the patient's general health and to a proper regulation of the quantity of and intervals between doses as near to the establishment of a normal balance as possible.

Some patients cannot be taken off their addiction drug at all, even though no chronic disease be present, and proper legitimate provisions should be made to allow, to this type of case, access to a sufficient daily quantity to maintain a proper physical balance until such a time as the general condition of the patient will warrant a final withdrawal of the addiction drug.

Morphine acts as a stimulant to the addict and not as it does on the non-addict in therapeutic doses. Enough must be taken by the addict to maintain the physical balance, that is, to neutralize the antidotal substance which produces withdrawal symptoms. Since this stimulation saps the nervous reserve which has been built up during the hours of sleep throughout childhood and youth, this reserve must be rebuilt by frequent daily short periods of sleep, especially after the noon-hour meal, and by longer hours of sleep during the night than are ordinarily indulged in.

It may be added that, until each State appoints a commission for the study of drug-addiction disease, as well as a national commission for the same purpose, and until proper regulation and control of the manufacture and distribution of addiction drugs is established, both in this country and abroad, the problem will continue to remain at its present status, namely, that of being entirely uncontrollable; while the drug abuse in the United States will continue to increase at its present alarming rate.

This problem is one essentially up to the medical profession. It should be squarely met and, as far as possible, controlled.

Ethics and the Doctor

By SIMON LOUIS KATZOFF, A. M., M. D., Bridgeport, Connecticut

Author of "Timely Truths On Human Health"

EDITORIAL COMMENT.—Here is a discussion of medical ethics that offers much food for thought. Physicians are not perfect. No one claims that they are; and, if they were, they would be the most insufferable prigs to live with. However, certain rules of conduct, in dealings with their clients, amongst themselves and with the public at large, are properly formulated and should be lived up to by each individual physician. Our shortcomings we deplore. It is well that they are called to our attention from time to time.

ETHICS, or moral philosophy, is the study of rules and principles relating to human conduct, or duty. There are, of course, various rules of practice, according to the kind of profession, or vocation, such as, political or social ethics, legal ethics and medical ethics. The writer is chiefly concerned with the subject of medical ethics; that is to say, the relationship and duties of the physician toward the patient,

and vice versa; between physicians themselves, regarding consultation, interference; compensation and duties of the profession to the public. What really concerns the public most is, the clear understanding of the duties and obligations of the physician to the public and of the public to the doctor.

Let me say, in advance, that physicians, irrespective of school, be this "regular," Eclectic, or Homeopath, are, as a whole, as ethical or as honorable as any group of men in any profession. It is claimed that physicians are devoid of conscience, in numerous ways; such as, making more visits to the patient's bedside than is necessary; that those skilled in surgery abuse that ability by advising operations, when conditions do not warrant them; that some guarantee to cure apparently incurable ailments when, in all truthfulness, the physician should not and could not guarantee the cure of *any* ailment; that physicians neglect to diagnose the cause of the disorders due to psychic or economic influences, and administer medicines while ignoring the patient's habits, temperament and occupation. I do not justify these demerits or neglects. I ask the impartial, unbiased reader to name a profession, vocation or trade that is more perfect; one that is more honest, more capable and more self-sacrificing than the medical profession, with all its faults.

It seems that every art, profession, trade, business or vocation today is far from ideal; tainted with commercialism, more or less, and the medical profession is no exception. Just as long as the bread and butter of the physician depends upon the sickness and misery of the people, instead of on their health and welfare, as it should be—and, some day will be—just so long will this sad state of affairs continue to exist. It really becomes a social or economic problem. The *people themselves* will have to solve it, and will solve it when they understand it.

The Physician's Calling Should Be Above Commercialism

The noblest calling is that of the doctor. In alleviating sufferings, in assisting nature in the restoration, more health, he is the greatest benefactor to mankind. Such a calling should be devoid of malpractice and commercialism. There should be no incentive for it. It should be different from an ordinary matter of merchandise. Lungs, hearts, intestines, livers and spleens should not be sold for a price or be put on the "stock exchange". If one burns up my suit of clothes or sells me a cotton one for a woolen one, or if he overcharges me for that particular commodity, he has not injured my health, happiness, or destiny. But, once one meddles with my liver, removes unnecessarily any internal organ, or ruins my heart, digestive system or breathing apparatus, then I have been done an irreparable, permanent injury—an injury that results in loss, not only to me, but to my dependents and even to the State, whose greatest assets should be, a healthy, happy, optimistic body of citizens.

By living their own peculiar lives, doctors become infatuated with themselves and, in time, begin to feel their "superiority" to others. Eventually, they become jealous or envious of each other. Many times, the patient is the victim, as a result, just as a client would be the sufferer if the lawyers should settle their case while playing pinochle or poker.

Jealousy an Ancient Evil

On the subject of "Medical Ethics", the late Doctor A. Jacobi, in "Reference Handbook of The Medical Sciences," says: "Galen, himself, complained of having suffered much, even physically, from the jealousy of the doctors. Their relations between the members of the medical profession remained bad through centuries, though professional leaders and governments tried to make the doctors behave like gentlemen. Through centuries, statutes of associations, faculties—for instance, those of the Chirurgeons of Paris, A. D. 1370, the barbers of Alsace, the medical faculties of Leipsic (1309), Cologne (1392), Vienna (1494)—refer to all sorts of rebukes, reprimands, fines, and, even, incarcerations on account of unethical behavior. Johannes Peter Frank was so disgusted with the behavior of doctors, when they met in consultations, as to advise the calling in of the police on all such occasions.

Old-Time Regulations

"The history of what may be styled the business relations of practitioners is quite extensive. No 'barber,' chirurgeon, or practitioner was entitled to take a case which was under the treatment of another,

unless the predecessor was notified, paid, and decently discharged. The large number of regulations, orders, and, sometimes, heavy fines emanating from governments and faculties prove the frequency of transgressions.

"Consultations were always frequent—either desired or feared. Hippocrates says that quacks refuse to call other practitioners but that a physician, in a case beset with difficulties and dangers, will demand the presence of a colleague without any injury to his own reputation. Still, the anxiety of the patient and his friends overdid the practice of calling consultations. Pliny reports that the monument of the Emperor Hadrian was inscribed *Turba medicorum perdidit Cæsarem* (the large number of doctors killed the Emperor). Henry IV, of France, calling (1594) upon one of his state officers who suffered from retention of urine, found him surrounded by sixteen doctors. The patient is still dead".

The Commission Practice

The relation of the physician to the pharmacist is sometimes looked upon with suspicion, even today. The "commission, or split-fee" game has become quite an alluring traffic. There are some medical men who demand commissions. Commissions are asked from, and paid by, instrument manufacturers, truss and bandage makers, druggists, nurses and others. Is this ethical? Who pays for the commissions? The people, especially the poor people. This is not an unusual but a quite frequent matter. In New York, medical associations and public hospitals were obliged to brand the practice as a gross outrage and they even threatened the transgressors with expulsion. That alone proves its frequency. In spite of all this and more that can be said, the teaching of *Ethics*, in the medical colleges, is almost totally neglected. The size of a microbe's abdomen and how to *fear* things from germs to bogymen, seems to be more important.

Medical Societies

A great deal can be said regarding the medical societies themselves. Not everybody can join. They are like any fraternal lodge. One may be a highly respectable physician, gentleman and citizen; he may enjoy a good practice and the good will of thousands of people; he may be one who is honest and clean, morally, physically and otherwise, yet, he may not always be able to "get in". Why? Well, it may be due to the fact that he has told the truth too openly. It may be, that he belongs to a "different school". It may be because he is feared, because he knows more. It may be because he has had a *personal* misunderstanding with an influential member. Such is the sense of justice of medical and other "fraternal" societies, today. Many a good man is kept out while many a man who is far from perfection is a member, perhaps one of the leading officers. But, of course, that is not anything new to those who belong to fraternities, where a prospective member may be "black-balled" almost any time, either because a prominent member of the clique owes the prospective member a "ten-spot" or for some significant personal reason, or despite the lack of good reason.

Is it *ethical* for the doctor to prescribe proprietary or patent foods, medicines and nostrums and, on other occasions, grumble at the invasion of patent medicines?

Is it *ethical* to assume that a doctor has a mortgage on a patient so that he dare not or can not make a change in his medical attendant if he so desires?

Is it *ethical* to say: "What! Dr. So and So, was here yesterday? Why, what does he know anyhow? I get his patients almost every day"?

Is it *ethical* to look at the bottle of medicine prescribed by the first doctor, or at the capsules left, and then, in an underhanded way, remark: "I know what is in that bottle; I wouldn't give it to a dog"? Would it not be better for all concerned, if the doctor said: "Well, Mrs. Jones, it is a little hard to say what those capsules or the bottle, contain, but, I'm sure that Dr. So and So has done the right thing. He is a good doctor, but, now that I'm here I'll ask you to follow my directions." Isn't it nice to be nice? Why not? The world is large enough for all; and life is too short to waste it on abuse.

As to Advertising

Personally, I never have believed in newspaper or similar methods of advertising. However, I am tolerant and democratic enough to extend to any member

of the medical profession the privilege of advertising if he so desires, *providing* that there are no exaggerated claims, lies, or fraud in the content of the advertisements. If he merely announces his specialty, or has his professional card inserted in the paper, let him do it if he desires and do not hold him in contempt for that. There is nothing unethical in it.

A great deal can be said regarding the "*ethics*" of announcing the doctor's name at the moving picture show or theatre as "needed" at the phone, or the announcement in the press of most of the leading operations performed. A volume can be written regarding the "ethical" or, rather unethical conduct of doctors to one another on account of having graduated from different schools, of the "ethics" of the State Boards in the "examinations" or reciprocity proceedings, of the "ethics" at public hospitals, clinics or free wards, but, space will not permit details.

The Doctor's Position

Now, let us for a moment consider matters from the doctor's standpoint. Just imagine yourself in his position. You have just received your "sheepskin", after enduring a battle with your mind and conscience for a number of years—from four to seven. You are now a fullfledged M. D. and as proud as a peacock. You feel as if you know *everything* from the size of a germ's molar to that of the diameter of a camel's hump. Still, one thing is beginning to bother you and your folks, that is, how will you make a living? Where should you hang up your shingle?

Unless your father is a physician, or your uncle is still willing to take care of you for another few years—although tired of such a job already—you will have to start out on your own initiative whatever that may be. If you locate in a wealthy neighborhood and happen to secure a few patients there (which would be by accident), you will have to cater to their whims and fancies; otherwise, you will not be looked upon with much favor. You must not insult their palates by telling them to eliminate excessive sweets; to sleep after midnight; to take more exercise and the like. In other words, if you want to build up a practice among them you may have to crush your intelligence and tickle your "silkhose-brigade" patients. You may, after a while, begin to think "I should like to keep my principles, but it seems that my principles won't keep me."

If, on the other hand you "commence" among the working class, you will meet with the cry of woe, and the withered hand of poverty will be before you. You will see the babe in its mother's arms not dimpled but pale and emaciated. You will observe the dark entrances to their "homes"; the poor illumination at night, lack of ventilation, foul air, insanitary toilets, shabby clothes and filthy rooms. Poverty will stare at you. Your heart will break and a tear will fall if you take a reasonable fee. And, yet, if you don't, how will you pay last month's rent? How will you purchase that new brass cuspidor or desk chair you looked at a few days ago? And, don't forget, you could use another suit soon. To make a long story short, you will soon begin to feel that you are between the devil and the deep sea. Then, you will begin to muster up a little more courage, charge regular fees, come at regular times and become a "real" doctor, like the rest of them.

The Public Responsibility

The truth is, that the public does not treat the doctors right. The truth is, that the public *itself* is responsible for what *un*ethical procedures there may be in the medical profession. The truth is, further, that the public never has had a chance to even begin to think about the vital problem of medical ethics or any other ethics. When the public recovers from its social inertia, it will be an established truth that the doctors will not suffer because the health of the community is good. People will stop being so blind and thoughtless as to give the doctor a pecuniary interest in disease while giving him little or no interest in the business of keeping them well and in good health.

We should hold in high esteem the doctor who keeps us in good condition. We should see to it that he is comfortable in every respect and reward him for keeping us well. He should not have to depend upon calamity for his bread and butter, inner tubes, and nail-soled shoes. Seemingly, some people can not appreciate this viewpoint. Is it because they live and move and have their being in a tepid at-

mosphere of lies and quackery and sneers and leers and sham and shame?

Not until doctors are being paid for keeping us *from* being sick and not until their existence, comfort, honorary degrees and promotion depend upon our being healthy instead of sick, shall we ever have less sickness, more happiness, and more genuine ethics. Then, also, will commercialism cease to be just cause for reproach.

Scarlatina

By HYMAN I. GOLDSTEIN, M. D., Camden, New Jersey

EDITORIAL COMMENT.—There can be no doubt about the value of occasional journal articles devoted to such serious ailments as scarlet fever. Indeed, we take much pleasure in giving publicity to this résumé of what has been ascertained and published, on the nature and treatment of this serious disease, in the most recent years. We are certain that the readers of CLINICAL MEDICINE will agree with us in considering Doctor Goldstein's article timely and as being of great value.

SCARLET fever, scarlatina or scharlach (febris rubra). Scarlatina is the scientific name for scarlet fever and refers to any case of the disease whether it be mild or severe. Sydenham (1670) first recognized it as a distinct disease among the acute exanthemata. Scarlet fever is almost constantly present in the larger cities in North America. Outbreaks of scarlet fever in epidemic form are rare in India, Japan, Ceylon, Asia, Australia and Africa.

Etiology

Klein's streptococcus, Edington and Jamieson's bacillus scarlatinæ, and Mallory's protozoon body were each thought to be the cause. Virulent streptococci are *always* associated with the special organisms of the disease itself. These streptococci are known to be the cause of many of the severe complications that arise in the course of this disease. Jochmann found streptococci to be the most common and dangerous cause of the secondary infections of scarlatina, but, they are not the cause of the disease. However, while we do not know the cause of scarlatina, it has been definitely proven that the streptococcus is the main etiological factor in the tonsillar and pharyngeal pseudomembranous conditions of scarlatina. It has been definitely established that the Klebs-Loeffler bacillus is absent in the great majority of cases in the early scarlatinal angina.

In 117 cases of scarlatinal angina, G. H. Memoine found streptococcus pyogenes alone in 93, while the Klebs-Loeffler bacillus was found, in addition, in 5, and the b. coli communis in 9 cases.

"Inclusion bodies" have been found by Bernhardt, Döhle, Kretschmer, Höfer and others. These "inclusion bodies" are present in the polymorphonuclear cells of the blood in scarlatina patients. Klimenko's fusiform bacillus and Schultze's "micrococcus S" are not the causes of scarlatina. At present, it may be stated that the specific germ of scarlatina has not yet been discovered. Mallory and Medlar thought that scarlatina may be due to a strongly gram-positive bacillus (b. scarlatinæ); however, this is not proven.

General Symptomatology

The disease is commonly ushered in by sore throat, headache, vomiting, together with a very rapid pulse, sharp rise of temperature and by the appearance of an erythematous rash, seen usually by the second day upon the upper thorax and neck, and then spreading rapidly over the entire surface of the body. The tongue becomes reddened at the tip and margins, with swollen, papillæ projecting, giving rise to the "strawberry-tongue" appearance. The uvula is injected and the buccal mucous membrane is of a bright-red tint. There is tenderness about the neck, pain over the submaxillary glands, which often are swollen. The maxillary, submaxillary, inguinal and axillary glands, especially the last two groups, are neary always enlarged. The tonsils become very red and swollen and may show whitish patches. Some cases may show early marked involvement of the

[1]Read before the Camden County (New Jersey) Medical Society, February 10, 1920.

pharynx and with a but poorly defined, irregular, transient rash, or, this may be wholly absent. Some cases may show a very faint rash for a few hours and slight redness of the pharynx and tongue (often attributed to "stomach upset"). These are the cases that may cause ill feeling and dissatisfaction between the patient's family and the attending physican, because of the question as to diagnosis.

The trouble is, that many of our mild, atypical cases of scarlatina resemble other possible minor ailments. It is, therefore, advisable, in all doubtful cases, to withhold the expression of a positive opinion for twenty-four to forty-eight hours, at least, until positive evidences of disease have appeared.

The prodromal symptoms are of short duration, usually a few hours, and may be entirely overlooked. The first thing noticed may be an erythematous blush appearing first over the upper part of the chest, cheeks and neck, it being a bright, fiery red blush.

The period of incubation varies from three to seven or eight days. This period may be shortened or prolonged. The more severe the epidemic, the shorter is the incubation period.

Signs and Symptoms

During the first twenty-four hours, the characteristic early symptoms are, the sudden and abrupt onset, vomiting (often early and persistent), headache, intense congestion of the faucial mucous membrane, sore throat, rapid rise of temperature, and rapid increase in pulse rate, sometimes, convulsions. These suddenly appearing symptoms and onset are suggestive of scarlatinal infection.

1. Von Leube attributes great significance to early vomiting and considers this an initial symptom of the greatest diagnostic value, occurring more often in scarlatina in childhood than in any other disease, with the possible exception of pneumonia.

2. Throat. Early sore throat is almost as constant as the eruption. There is present, usually, from the first, a diffuse, mottled, congested appearance of the uvula, soft palate, and tonsils, and the tonsils are swollen, the crypts filled with exudate.

3. Skin. The early rash develops, as a rule, within the first twenty-four to thirty-six hours and appears as a widely scattered punctate blush and differing from the sharply defined, pin-head, slightly elevated rash of measles. Also, the areas of pale white skin between the measles rash are absent in scarlatina.

At the end of the first forty-eight hours, the real scarlatinal rash has made its appearance, first upon the upper thorax and then spreading quickly over the neck, chest, extremities, but only slightly upon the face. The rash is a diffuse, scarlet blush made up of minute brightly-red injected puncta, very slightly elevated and closely studded together forming a uniform or finely mottled surface. The region about the mouth is comparatively free from rash. The eruption develops more rapidly in blonde, healthy, full-blooded children than in darker-skinned or pale children. The rash is more pronounced over areas exposed to irritation or pressure as, the buttocks, back, bends of elbows, groins; upon streaking or pressing the skin, the red blush of the eruption momentarily pales. This paling is not characteristic of scarlatina in any way.

As stated previously and now emphasized again, the earliest places where the rash appears are, upon the upper thorax and neck, especially down over the subclavicular regions and far less commonly upon the small of the back. In a few hours, the rash spreads all over and, at the end of ten or twenty hours, it reaches the legs and the entire trunk.

I once more emphasize the fact that (differing thus from measles and smallpox), upon the face, the true scarlatina rash is much less marked and occurs only upon the cheeks and forehead, the lips and nose usually being free, giving the appearance of a peculiar white ring, which is quite striking. The dorsal surfaces of the hands and feet show a marked eruption, while the plantar and palmar surfaces do not.

The rash remains at its maximum for from one to three days. The remittent intensity of the rash has been emphasized by Henoch.

4. Pulse rate. The pulse rate is markedly increased, out of all proportion to the fever. From the second to the third day, the rash begins to fade and the temperature comes down slowly (in measles, there is, very often, an abrupt fall in temperature), but, the pulse continues quite rapid.

5. Tongue. The appearance of the tongue and throat is almost pathognomonic

of the disease, in some cases. The eruption makes the tongue "sore", at times, resulting in the well-known "strawberry tongue." After the second day, the tongue loses its heavy coating and becomes deeply injected, the papillæ at the tip and along the margins becoming more prominent ("katzenzunge")

6. Enlarged Glands. Von Jürgensen emphasizes the diagnostic value of early enlargement of the inguinal glands, in scarlatina. Schamberg also has emphasized the great frequency of enlargement of the inguinal, axillary, and maxillary glands. He found the inguinal glands enlarged in all cases, the axillary in 96 percent, the maxillary in 95 percent and the posterior cervical glands were enlarged in 77 per cent of the cases. The study of these 100 cases, by Schamberg, showed that the maxillary glands commonly attained the largest size and also most frequently underwent suppuration. In all of the 100 cases studied, the enlargement of the lymphatic glands was well marked on the second or third day of the disease.

7. Polymorphonuclear leukocytosis is present. In measles, there is a leukopenia. In 30 scarlatina cases, Döhle found "inclusion bodies" in the polymorphonuclear leukocytes. He did not find them after the sixth day of the disease.

Kretschmer, and Nicoll and Williams also found these bodies in the blood smears in 45 out of 51 cases.

Isenschmid and Schemensky have found them in virtually all the cases of scarlatina in the early stage. They are not found in German measles, measles, diphtheria or whooping cough. The most characteristic "inclusion bodies" are those of a triangular form with a long tail-like end. They may be found in pneumonia.

8. Rumpel (1909), Leede, and Jampolis have reported and recommended as a suggestive diagnostic sign, the appearance of petechiæ in the skin on the inner surface of the elbow joint, when the skin is stretched until it becomes anemic, after a broad constricting band has been previously applied above the elbow joint for ten or fifteen minutes and then loosened. A negative reaction is perhaps a greater indication that scarlatina is not present than is a positive reaction for its presence. Jampolis found it in 199 out of 200 cases.

Bennecke confirmed the diagnostic significance of the Rumpel-Leede phenomenon. A venous stasis only being produced in the arm, the arteries being left unaffected, the hemorrhages appear at the elbow in from 5 to 20 minutes; punctate or larger, in some cases becoming confluent. He found them in nearly 100 percent of cases.

9. Desquamation. The eruption is due to an inflammation of the skin and to very minute vesicles which form in the deeper layers of the epithelium and loosen the cells. This loosened epithelium peels off, and gives rise to the characteristic desquamation. Desquamation usually begins in from ten to twenty days after the onset of the disease. It begins around the roots of nails, palms, and soles and extends over the whole body.

Schumacher states that desquamation is not a positive sign of recent scarlet fever, as that disease can exist without any subsequent desquamation, and that desquamation may follow after a number of constitutional diseases of long duration, as, pneumonia and tuberculosis, or some local inflammatory condition of lengthy duration, as, sunburn or poison-ivy poisoning; or the internal ingestion of some drugs, as, arsenic; or the external application of strong antiseptics, as, phenol or formaldehyde gas. Desquamation begins first where the rash was first seen and from where it first disappears, namely, the upper thorax and neck.

10. P. Teissier and R. Bernard found a positive Wasserman reaction in 84 percent of the cases of scarlatina in the Hôpital Claude-Bernard.

The Babinski sign, in scarlatina and diphtheria, has been reported to have occurred in a rather large percentage of cases, 19 to 25 percent of all cases.

11. Transient Albuminuria. Early in the course of the disease, albuminuria is seen in 75 to 90 percent of all cases, according to Eichhorst.

Age

The greatest number of cases occur between the ages of one and five or six years. McCollom, at Boston City Hospital, reported that 75 percent of the patients were between 2 and 10 years of age.

Immunity

As a rule, one attack protects against a subsequent infection. Second attacks have been reported, though. Others have reported even third attacks. One must not make a positive diagnosis of a second at-

tack of scarlatina without first excluding all other possible conditions, and without a careful study of all the presenting symptoms and signs, and thorough study of the history of the case. Henoch has seen but one authentic case of a second attack of scarlatina. According to Korner, when a second attack occurs, it usually follows from two to six years after the first (which first attack usually occurs before the age of 10 years). Murchison has reported a third and Stiebel a fourth attack of scarlatina. The various erythemas must, of course, be excluded; such as, drug-erythema, measles, and rubella; also, antitoxin erythemas; toxic or simple erythemas, erythema scarlatiniforme, erythema scarlatiniforme desquamativum. In April, 1914, Jacobsen reported that a family of four children had scarlatina in 1908 and 1911. Over a year later, the children had scarlatina anew, every one of the children having a typical attack. The second attack was more serious than the first, in all of them, and one girl, 8 years old, died of it, from myocarditis.

Types and Varieties

Numerous varieties, or types, of scarlatina cases have been described, such as,

1. Scarlatina anginosa.
2. Scarlatina maligna (toxic).
3. Scarlatina modificata:
   - (a) Scarlatina miliaris.
   - (b) Scarlatina laevigata.
   - (c) Scarlatina laevis.
   - (d) Scarlatina sine exanthema.
   - (e) Scarlatina hemorrhagica.
   - (f) Scarlatina variegata.
   - (g) Scarlatina sine angina.
   - (h) Scarlatina sine febre.

A simple classification is this one—

1. Well developed and severe cases of scarlatina.
2. Mild ones; in which there is sore throat, and a slight (evanescent) rash, with subsequent desquamation or peeling.
3. Still milder cases; not a sufficiently concentrated infection to cause a rash, but producing a sore throat and, possibly, exfoliation of the tongue ("strawberry"). These "subcases" are of the greatest importance from a public-health standpoint. The eruption may at times be abortive, or not be seen at all, or the rash fails to appear (scarlatina sine eruptione). It is possible that the rash appears but is so faint and evanescent as to go unnoticed.

Mortality

In a study of 1,153 cases of scarlatina, by L. I. Dublin, there were 90 deaths, or a mortality rate of 7.8 percent. Mc Collom found an average of 8.1 percent mortality rate in 37,810 cases, in Boston, in 28 years. In 32,317 cases of scarlatina, during a 12-year period in Philadelphia (1898-1910) 1,759 deaths occurred, or a mortality rate of slightly over 5 percent.

Age Incidence

Dublin found that 82 percent of all cases (1,153 in the series) were among children between two and ten years. The greatest disposition to the disease is found among children three to seven years of age, according to Dublin. According to Osler, 90 percent of all scarlatina deaths are of children under ten years. Dublin's figure was 92 percent.

The mortality averages from 5 to 12 percent, varying in different localities and in different epidemics.

Sequelae and Complications

Otitis

According to Carter, otitis is perhaps the commonest complication of scarlatina. According to Holt, perhaps 75 percent of the severe cases show that complication. In 4,015 cases analyzed by Caiger, 11.05 percent show otitis media. Bader and Guinon found that 33 percent of all the cases of scarlatina showed mild or catarrhal otitis media and the purulent form occurred in 4.5 percent.

Ten percent of acquired deafness has its origin in scarlatina. Barasch found, among 1,438 cases, otitis in 13.8 percent. Fisher reported middle-ear trouble in 20 percent of his cases.

Richardson, of Providence, in a letter to me, states that about 12 percent of the cases show acute otitis media with less than one-half percent developing mastoiditis. In 4,397 cases studied, Finlayson found otitis in 10 percent.

Nephritis

Osler records the presence of nephritis in from 10 to 20 percent of his cases. H. Barasch reports that 16.1 percent of 1,438 cases developed nephritis, at the Urban Hospital, Berlin. No case, however mild, is wholly free from the danger of a subsequent severe renal inflammation. The occurrence of nephritis, during the course of scarlatina, is due to the circulation, in the blood, of the specific virus or toxin and which acts as a direct irritant. Nephritis

appears to be less common in young adults than in childhood. Scarlatinal nephritis develops late in the first or early in the second week; from the tenth to the twentieth day of the disease.

We may have (1) Early, or initial, mild nephritis, (2) septic nephritis and (3) postscarlatinal nephritis.

Out of 1,200 cases, Richardson found, two or three years ago, in a study of the records of the Providence City Hospital, about 1 percent of nephritis with no deaths. However, since that time, he found that the incidence in nephritis was very much greater in that one year than in all the cases he had previously studied.

Wilson, of the Bureau of Hospitals, New York City, states, in a personal communication, that the frequency of complications in the order of their occurrence are, endocarditis, angina, arthritis, nephritis, mastoiditis. Complications are very much more frequent where the patients are permitted to get out of bed too soon after the fall of the temperature. Barasch reports, among the 1,438 cases above mentioned, the following complications: nephritis, 16.1 percent; otitis, 13.8 percent; rheumatism, 5.9 percent; sepsis, 9.1 percent; endocarditis, 1.3 percent; late involvement of glands in the neck in 33.4 percent, and complicating diphtheria in 16.4 percent of the total number of cases.

Heart

The heart is very susceptible to the scarlatina poison, as is shown by the marked tachycardia and the irregular, small, rapid pulse. The mural endocardium (myocarditis) probably is affected much more often than are the valves themselves.

Acute endocarditis apparently is rare. Murmurs often may be heard, probably due to the toxic myocarditis. The rapid and, at times, irregular pulse is seen chiefly early in the attack. Later on, the heart sounds may lose the normal tone. This evidence of cardial weakness may be due to endocarditis or myocarditis; probably the latter, because it is usually the endocardium of the heart wall, rather, than of the valves that is involved.

In cases of nephritis, there is seen, in children, acute dilatation and hypertrophy of the left ventricle.

In postmortem examinations of 49 cases, A. Stegemann found, in toxic cases of scarlatina of short duration, the parenchymatous changes in the heart muscle to be slight. In the infectious cases of long duration, there were acute parenchymatous degenerations and necrosis. The number and size of the Nissel bodies were markedly decreased in severe toxic cases, in contrast with the infectious cases. He believes that, in severe toxic cases of scarlatina, of short duration, the cause of the heart weakness lies in pathologic changes in the heart ganglia.

Adenitis

Fisher reported that, in 6,000 cases, 14 percent had adenitis. The frequency of this complication varies considerably; it often occurs in the early stages of the disease or, at times, in the second or third week.

Diphtheria

Diphtheria complications occur as a rule later in the course of the disease and often after complete subsidence of all the primary throat inflammation. Paralysis may occur in these cases. Henoch has never seen oculomotor or palatal paralysis following scarlatinal angina, except only in those few cases complicated by a true diphtheria. Richardson states that he had only about one to three cases of diphtheria develop among 200 to 300 cases of scarlatina seen every year. R. J. Wilson, New York Department of Health, states that diphtheria is an infrequent complication, and, since the advent of the Schick Test, it has almost entirely been eliminated as a complicating development in the wards of the hospital. It should be remembered, however, that secondary infection by the Klebs-Loeffler bacilli may occur, and most likely after the first week. This may be easily overlooked, and it is therefore advisable to examine the throat at each visit, and, if its appearance is suspicious, to take a culture-smear at once.

[*To be Continued.*]

What Others are Doing

SOME PROCTOLOGIC PAPERS

A review of the papers read at the last meeting of the American Proctologic Society is of much interest to the general practitioner because the subjects are those that baffle the man of limited proctologic experience, and also attractive to the specialist because they are the latest reports of individual research.

In the President's address, Doctor Lynch pleaded for a broad study of the whole digestive tract since all its parts are closely related physiologically and proctologists must be abdominal surgeons as well. In a paper on "Observations in Army Proctology" Doctor Hirschman commented on the apparent lack of proctologic knowledge by the enlistment examiners who permitted many men to be taken into the Army and sent over sea while these were suffering with rectal disturbances which were soon aggravated by camp and trench life. These men then were sent to the hospitals where they prevented battle casualties from receiving the attention to which the latter were entitled.

Pruritus ani, that most perplexing of proctologic ailments, was considered from two view points: Dr. Dwight Murray claiming the streptococcus fecalis as an etiologic factor in virtually 100 percent of his cases, while Doctor Terrell insisted that ulcerating pockets about the anus always were found, in his experience. Such a difference of opinion compels our careful study of every patient because either or perhaps both conditions may be factors in the case at hand.

Doctor Jelk's paper on the increasing prevalence of Cercomona Intestinalis Hominis infections, in the Mississippi Valley, and his warning of the necessity of taking steps to find the source of these infections and prevent a widespread epidemic among infants and children, may be timely because of the constant shifting north from our southern states of large numbers of people in search of labor, and, also, of northern tourists who winter in the southern watering places.

Dichloramine-T and other chlorine-bearantiseptics according to Dakin, came in for consideration regarding their uses in diseases of the terminal segment of the bowel. In the treatment of colitis, sigmoiditis and proctitis, the final word has not been said and much is constantly being published relative to mild and strong solutions of these chlorine products. Dr. J. Coles Brick reports a case of persistent mucopurulent diarrhea that was cured by colonic irrigations through the appendicostomy stump, using chlorazene solution of 10-percent strength. In all forms of colonic infection, these preparations are valuable adjuncts as parasiticides.

CAUSES AND TREATMENT OF PRURITUS ANI

Pruritus ani is not a disease but a most distressing symptom. Dr. E. H. Terrell, in the *Southern Medical Journal* (February) considers the causes and treatment of this condition, both of which are not sufficiently known.

About a year ago, the author found the cause of this condition to lie in certain small infected areas, taking the form of blind pockets, or, more often, sinuses, with their openings at, or just beneath, the anorectal line, and which extend downward under the skin of the anal margin. The covering of such a pocket is glistening in appearance at its upper part, which is very distinct from the pinkish mucous membrane immediately above it. The opening of a pocket should be looked for, where these surfaces join, at a point corresponding to the anorectal line. When the covering of an anal pocket is removed, a denuded ulcerated surface is found, which heals very slowly.

However, the simple sinus is responsible much more frequently. This is a small

channel that sometimes begins at the bottom of an anal valve, though, frequently, its opening appears as a slight depression, somewhat below the level of the valves. When a probe is introduced, it passes downward under the skin below, but, no external opening may be discovered.

If the itching is more or less localized, in a small portion of the perianal skin, one sinus only may have to be looked for; with more extensive involvement, two to four sinuses may be found. Some help may be obtained by having the patient point out the areas of most intense irritation. Also, there is, often, an elevation of the skin over the blind end of a sinus.

While it is true that we have to deal with a very low-grade infection, we can scarcely hope for relief until satisfactory drainage is established. When a pocket, or diverticulum, is to be dealt with, it has been found best to remove the covering membrane, permitting the underlying surface to heal by granulation.

The treatment of an anal sinus is somewhat simpler. With a probe inserted as a guide, the tract is laid open from above to its termination under the skin below. The wound should be inspected every few days, to see that it heals from the bottom, for, there is always a strong tendency toward a re-establishment of the sinus.

These operations are done easily in the office, using any local anesthetic. After the tracts are opened, the itching will be found much diminished, but, entire relief may not be expected until the parts have healed completely. Healing has seemed rather slow in the majority of cases due to the contraction of the sphincters over the granulating surfaces. If the operation were done under general anesthesia and the muscles thoroughly divulsed, the time of healing would be shortened decidedly.

ON WOOD-ALCOHOL POISONING

Since the advent of prohibition, there have occurred a number of fatalities from the substitution of methyl alcohol for ethyl alcohol in beverages. If you take away something to which the people have been accustomed for years, what will they take as a substitute?

Dr. S. Dana Hubbard, of New York, contributes an article to the *New York Medical Journal* (Jan. 3, 1920), on wood-alcohol poisoning, in which he describes the clinical picture of this form of poisoning.

The symptoms of acute wood-alcohol poisoning are similar to those observed in cases of poisoning by grain alcohol and other alcohols of this series. The acute form of wood-alcohol poisoning may be divided into three stages.

1. An ordinary mild intoxication, with some dizziness, nausea, and mild gastrointestinal disturbance, terminating in recovery within a few days. There may occur, occasionally, some damage to vision.

2. A more pronounced effect, with accentuation of the symptoms, especially, severe gastroenteritis and dimness of vision.

3. An overwhelming prostration which terminates in coma and death.

The characteristic feature in most of the severe cases of wood-alcohol poisoning that do not terminate fatally is, total blindness, coming on in a few hours, or, perhaps, not for several days; then, a partial restoration of vision which, in a few days, or weeks, gives place to more or less complete and permanent blindness with atrophy of the optic nerve.

There is no antidote for this form of poisoning, and the treatment of many of these cases is entirely symptomatic. Dr. A. H. Brundage, who has reported several cases, recommends the following general therapeutic measures: Syphonage of stomach, cold affusions to the head, cardiac stimulants, inhalations of oxygen, pilocarpine injections, external heat to the body and extremities, moist heat over the kidneys, rectal enemas of hot coffee and normal salt solution. The treatment of the optic-nerve atrophy is not very satisfactory. In the early stages, he recommends pilocarpine and iodide of potassium, later, strychnine by hypodermic injection and by mouth.

DRUG TREATMENT OF HEADACHE

As to drugs (and it is upon these that the practitioner, particularly in poor-class practice, has largely to rely, both for their therapeutic value and for their aid to suggestion), perhaps the most valuable of all is valerian, either the valerianate of zinc and iron given in the form of a pill or the ammoniated tincture of valerian, usually employed in a mixture which also contains

some stimulants such as strychnine, or else in combination with some sedative, for instance, bromide of ammonium.

Valerian often will act like a charm in these cases, in spite of the libellous statements made by those people, who, after years of careless dispensing, tell us that they do not believe in drugs! Salicylates, phenacetin, and their allies should be strictly avoided, but, simple tonics often may be employed with great advantage, and it should at the same time be impressed upon the patients that their beneficial effects will largely remain latent unless their use be associated with regular outdoor exercise and careful attention to the bowels. Sometimes, when other methods have failed, the condition is relieved by a complete change of air and surroundings, wherein, again, the element of suggestion plays its part. Relief obtained in this way is rarely permanent, whereas drugs may be employed over a long period with progressively decreasing doses and given at less frequent intervals. The headaches of neurasthenia occasionally recur with a periodicity suggestive of migraine. This is particularly the case in those persons who are also victims of intestinal intoxication.—Kenneth Clarke, in *The Practitioner*, May 1919, p. 274.)

THE BARREL-STAVE SPLINT IN FRACTURE OF THE CLAVICLE

It is exceedingly difficult to find an effective and comfortable dressing for a fractured clavicle. In the *Annals of Surgery*, (Oct., 1919) there is a suggestion for a simple and practical splint, called the barrel-stave splint; though the author, Dr. Hubert A. Royster, does not claim that the idea is original with him. Here is the method of application.

To apply this barrel-stave splint to a fractured clavicle, the center of the stave is placed over the center of the patient's manubrium, at the suprasternal notch. The stave is then sawed off at each end to fit just inside the head of each humerus, while the shoulders are drawn backward. One inch from each end, a nail is driven into, but, not through, the splint. The splint is then padded with cotton, retained by a bandage, and placed in the position as first measured, the concave surface being next to the chest. While the splint is held in place, and the shoulders being kept firmly back, bandages are tied to the nails, carried under each axilla, and crossed on the back in the figure of eight fashion; as many turns are made and the stave is drawn as tightly as necessary. If there is a tendency on the part of the splint to turn, or slip, adhesive plaster may be applied to reinforce the bandage, but, this is rarely needed. If the patient is a heavy, muscular subject, the arm is put into a sling.

The advantage of this dressing is, its comfort. The patient may use his hands and forearms at will, without disturbing the fragments, and he is relieved of the distress caused by the old-time dressings.

We know that the proper position of the girdle of the upper extremity is obtained by throwing the shoulders backward, and not by elevating them. Indeed, any attempt to elevate the shoulder will result in an exaggerated position and will actually push the fragments out of line, when the clavicle is fractured. The real problem is, to throw the shoulders back and keep them there, a procedure that securely replaces the broken ends. The barrel-stave does this and nothing more.

EMETINE IN THE TREATMENT OF AMEBIC DYSENTERY

In the *Gazette des Hôpitaux* (Aug. 30, 1919) there are given a number of opinions on the dosage and methods of using emetine hydrochloride in amebic dysentery; that had been expressed before the Paris Therapeutic Society.

It was claimed that the poor results obtained abroad from the use of emetine hydrochloride were entirely due to the poor quality of the drug. It is important to employ fresh solutions; because old solutions will produce symptoms of nausea. The subcutaneous injection is the best method of administration and less painful than the intramuscular injection.

Emetine is an undoubted specific for amebic dysentery; while the double iodide of bismuth and emetine is said to have a more destructive action on the cysts than emetine alone. The double iodide, it is claimed, causes the disappearance of the cysts in 90 to 100 percent of the cases. Ipecac may, in certain cases, be given together with emetine; it acts not only on

the free forms of entamœba histolytica, but also on the cysts.

As to the alleged dangerous effects of emetine, Lesne reported that he administered several series of daily injections of 2, 3 and 4 centigrams of the solution to a 10-year old child. Doses of 1 centigram have been employed in children two years of age and older.

Professor Chauffard prescribes, in adults, a daily dose of 6 to 10 centigrams of emetine hydrochloride, administered subcutaneously in two doses of 3 to 5 centigrams each. He does not exceed a daily dose of 10 centigrams nor give less than 6 centigrams.

A course treatment should last six to eight days, followed by an interval of rest of from eight to fifteen days. Treatment is to be resumed if the bacteriological examination demands it.

The total daily dose should not exceed 6 decigrams during the period of treatment. One can, however, go as high as a daily dose of 8 to 9 decigrams. The efficacy of the treatment does not seem to have any relation to the dose employed.

The treatment by intermittent injections should be persisted in for six months after the disappearance of the cysts in the stools, even in apparently cured cases.

Emetine lowers the blood pressure, necessitating the employment of cardiac tonics; coffee, sparteine, camphorated oil, nux vomica and adrenalin, all are useful for that purpose.

MENORRHAGIA TREATED WITH THYROIDECTIN

In the *Gazette des Hôpitaux* (July 12, 1919), there is a report of a case of menorrhagia treated with a special French preparation called Hemato-Ethyroidine. This is a glycerinated preparation of the blood of a goat, from which the thyroid gland has been removed at least one month previously.

This is the case as reported by P. Emile Weil. A young married woman, 30 years of age and who had not borne any children, had been afflicted for more than one year with profuse menorrhagia, lasting twenty-five days out of every month. She was completely exsanguinated when she was sent to Doctor Weil after a curettement had been done without result. The only abnormality noted was, a small goiter on the right side, of the size of a small orange. There was no sign of Basedow's disease.

The examination of the blood showed an extreme anemia, with less than 2,000,000 red blood corpuscles and 40 percent hemoglobin. The coagulation of the venous blood was slightly abnormal; there being hardly any contraction of the clot, while the coagulation time was retarded, being 15 minutes.

Beside the menorrhagia, there was a tendency to bleeding of the gums, and some cutaneous ecchymoses existed. There was no history of hemophilia.

Thyroid extract was first used in small doses, 5 mg. and then 1 cg. a day, but, without result. In turn were tried, suprarenal, hypophyseal and mammary extracts and, also, blood serums. Arsenic and iron treatment was administered likewise.

After the third month in the hospital, hemato-thyroidectin was prescribed in doses of three teaspoons a day in coffee. In the course of a few days, the flow stopped abruptly, and the following monthly period came on three weeks later, lasting only five days and with a normal loss of blood.

Having interrupted the treatment at the end of two months, the flooding reappeared and lasted twenty days. The hemato-thyroidectin was given again for a week or two; after which the period became normal, and it remained so.

In connection with this interesting report, the Editor desires to call attention, again, to an article contributed to this journal by W. F. von Zelinski (Nov. 1916, p. 915). In that article, the good effect of mammary extract, in menorrhagia, is described. The present writer has employed mammary extract repeatedly for the relief of menorrhagia and always with highly satisfactory results. All this goes to show that, in these cases, the endocrine glandular system often is at fault and that endocrine medication many times will give prompt relief.

DESENSITIZATION IN SERUM-THERAPY

With the extensive use of serum therapy, certain phenomena of reaction have been observed in some patients. These re-

actions may be very severe and produce a condition of shock, even terminating in death. These individuals are said to be sensitized. How to desensitize them, is a problem of practical importance. In *Minnesota Medicine* (Oct., 1919) there is an extremely important article, entitled, "Desensitization in Serum Therapy," by Charles B. Drake.

Rather severe reactions have followed the intravenous administration of pneumonia serum in large doses. These symptoms may vary in character and may end in mild shock; recovery, usually, ensuing in at most a few hours.

If a second injection is given, after an interval of eight to thirteen days or more, a more or less severe condition of shock may occur, the more severe form of which may prove rapidly fatal and is known as anaphylactic shock.

Anaphylactic shock is the result of a repeated injection of the same protein, not necessarily serum, when a period known as that of incubation has interyened. The reaction is very definitely a specific one. The degree of shock depends on several factors. The smaller the initial dose, within certain limits, the more likely its occurrence. The larger the amount of the secon injection, the greater the shock. The shock may occur in a minute or two during the intravenous method, while it may be delayed ten or twenty minutes with the subcutaneous method.

Besredka has shown that, by giving extremely small doses and repeating them frequently and in increasing doses, the individual can be desensitized. Other writers suggest the simpler method of giving 0.5 to 1 mil. of any horse serum some four or five hours before it is given intravenously.

In a rather concentrated experience with both diphtheria and pneumonia serum, in a military base hospital, during the past year, Doctor Drake used routinely a modification of the various methods of desensitization that have been proposed. On admission to both, the diphtheria and the pneumonia wards, every patient was given 1 minim of serum intradermally, as in the Schick test. The skin reaction at the end of two, twenty-four and forty-eight hours was observed.

If there was a history of previous serum administration, asthma, a sensitiveness to horses, or a marked inflammatory reaction about the skin test, a subcutaneous injection of 1 mil of serum was given. In four to six hours it was felt safe to proceed with as large doses as were deemed necessary. Care was exercised to inject the serum very slowly, at first, in both, the intravenous pneumonia injections, and the intramuscular diphtheria injections.

MALARIA IN THE SOUTH

In *Public Health Reports*, (Aug. 22, 1919) there is a discussion of "The Malaria Problem of the South," by H. R. Carter, Assistant Surgeon General of the United States Public Health Service.

In the parts of the south and southwest where malaria prevails, it creates a serious sanitary problem. There, it easily takes first place on the list for the injury which it does to the community.

It is true that malaria does not give the highest, or even a high mortality. Tuberculosis, pneumonia and typhoid fever run well above it. The recorded mortality of a disease, however, does not indicate its true influence on the death rate. This is true of malaria. From its effects, physical and economic, in lowering the general vitality of a community, it is a causal factor in many a death in which it is not the terminal factor, the one recorded as the "cause of death."

It is not in its death rate that the gravest injury of malaria lies. It is in its sickness rate, in the loss of efficiency it causes rather than in the loss of life. One death from pneumonia ordinarily corresponds to about 125 sickdays-workdays lost, while one from typhoid fever corresponds to about 450 or 500 sickdays. A death from malaria, however, corresponds to from 2,000 to 4,000 sickdays. The man infected with malaria is frequently half-sick all the time.

If 1 percent of the population is stricken with typhoid fever, it is an epidemic and a bad one. Contrast this with 40 to 60 percent of a population per annum affected with malaria and you gain some idea of the importance of the disease.

The presence of malaria constitutes an economic disadvantage to any community. If half the population are sick, most of the time, they are not likely to be progressive and energetic. Factories, mills, and busi-

ness ventures of all kinds are very likely to avoid a region afflicted with malaria.

The most effective method of malaria control is, to get rid of anopheles mosquitoes. The methods depend upon the destruction of breeding places by removing, draining or filling the water in which they breed, or rendering it unfit for breeding, by current, oil, larvacides, fish and so forth, or a combination of them.

Roanoke Rapids, N. C., is a mill village, or, rather, a group of mill villages, with a total of over 4,000 population. Prior to the malaria work, the population was continually changing. Wages were good, work was abundant, and people came, but, they developed malaria and would not stay. The mill managers estimated the efficiency of their employees at from 40 to 60 percent during the four unhealthy months. During this time, machines were constantly idle.

The mill physicians averaged during the summer months, for 1912 and 1913, fifty calls per day for malaria. During 1914, the first year of malaria work (control of mosquitoes was depended upon), there were still a few cases (33) of malaria, being relapses from 1913. The efficiency rate rose to 90 or 95 percent and the average number of calls for malaria for the same months was three daily. In 1915, the average number of calls for malaria was one in three days.

Demonstrations made by the United States Public Health Service show.

1. That control of malaria is feasible.
2. That control of malaria is profitable.
3. And, finally, how to control malaria.

SODIUM CITRATE IN THE TREATMENT OF PNEUMONIA

In the *New York Medical Journal* (Nov. 1, 1919), there is a paper by Dr. W. H. Weaver on the treatment of pneumonia with full doses of sodium citrate. A rapid crisis or lysis can be produced, by this method, in from twenty-four to forty-eight hours, occasionally not until the fourth day. It acts by reducing the viscosity of the blood and preventing coagulation.

Forty-seven cases have been reported, forty-five of which have been successful; meaning that recovery ensued within forty-eight hours, as a rule, after the correct dose was given. A new treatment that will not bring about an immediate change for the better, with recovery inside of four days, at the most, hardly would be worth while discussing. Conversely, the uniformity of recovery, by an induced crisis, in forty-five successive cases is convincing. One case was complicated with pleurisy with effusion and severe cardiac disease; two cases were of postoperative pneumonia after severe surgical operations; and there were four almost hopeless cases of bronchopneumonia in children.

The restoration of the cardiopulmonary circulation is largely a problem in mechanics or hemodynamics. The volume of the flow depends upon three elementary conditions. First, blood pressure, second, fluidity of the blood, or viscosity; third, size and length of the blood vessels. The degree of viscosity of the various liquids is based upon the viscosity of water, as a unit, and stated as the "coefficient of viscosity".

The coefficient of viscosity of human blood had been found to be "about five times that of water". Hence, the blood pressure remaining the same, one-fifth as much blood as water would flow and, if the viscosity of the blood is reduced, approaching more nearly that of water, it will necessarily flow that much more freely. Conversely, if the viscosity is increased, the flow is reduced.

It was found that warm-water baths decreased the viscosity very considerably, while cold water had the opposite effect Loss of water, which the body suffers from any cause such as, drinking an insufficient amount of water, dry and hot air, high temperature, increase the viscosity of the blood, thereby rendering recovery more difficult.

In order to meet the indications as outlined, the author gives sodium citrate, with plenty of water, at the rate of 15 to 20 grains an hour, or 40 grains every two hours, sometimes more to a full sized adult, continued night and day, until the result is attained. Occasionally, this dose will act as a purge and the salt passes off through the bowels. This should be checked by a few doses of an opiate. The medicine should be continued into the second or third day after the crisis, to assure complete resolution. It should be firmly insisted upon, that small doses have no effect and will be disappointing.

Let's Talk it Over

Venereal Prophylaxis

VENEREAL PROPHYLAXIS

AS carried out in the military service, venereal prophylaxis consists in the injection of a silver-salt solution and the application of calomel ointment after exposure. This treatment is given, upon the man's return from liberty, at the medical unit where he is required to put his name on the prophylaxis list, so as to show that he has taken the prescribed prophylactic treatment. All recruits are given lectures on venereal diseases and are informed of the penalty for failure to take prophylactic treatment after exposure.

It is not my intention to endeavor to show that venereal prophylaxis, as carried out in the military service, is not of value, for, its value has been proved only too clearly; neither do I wish to make destructive, but, rather, constructive criticism, and if possible to suggest some method that is adaptable to civil life and which may be of greater value to the service.

From such data as I have been able to obtain, directly, in the service, it appears that too long an interval usually elapses between the exposure to infection and the use of the prophylactic treatment. Under actual service conditions, only 26 percent of the treatments were taken within six hours after exposure, while all observers agree that this treatment is of very little value, if any, after the lapse of six hours In the service, this is difficult to overcome, because prophylactic stations are not available and the prophylactic methods of the service are not such that they can be used under all conditions; the remedies used are not conveniently carried and unless the excess of silver salts is washed away, it will stain the clothing and the hands.

That men will expose themselves to infection under any and all conditions, is a fact that cannot be overlooked, and the problem must be dealt with in some manner if we are going to reduce the number of cases of venereal infection and keep up the good work in sex hygiene that has been begun and carried on in the military service from which so many men have returned in the past year. This work should be carried on on a broader scale than ever, not only because of the immediate results as regards the disease; that is to say, the pain, loss of time and decrease of the earning power of the victim; but, also, from the humane and economic standpoints, by preventing many children from suffering through the sins of their fathers, and by reducing the number of cases of insanity, blindness and invalidism now being cared for by the state, and which are due entirely to venereal disease.

If only 26 percent of the men in military service taking the prophylactic treatment did so in less than six hours, and if this measure is of no value after the lapse of that length of time, then this method could not be said to be over 26 percent efficient under the existing conditions; moreover, considering the paraphernalia necessary, I do not believe that it could be adapted to civil life with any greater success. Yet, an efficiency of 26 percent is much lower than would be tolerated for long in ordinary commerce or industry. Shall our work be only 26 percent efficient? If we are going to attain a higher grade of efficiency than this, it will be necessary to find more efficient methods, to preach prevention of venereal disease, and to leave public morals to our brothers, the doctors of divinity.

To be efficient, any prophylactic measure must conform to certain conditions:

It must be easily carried and easily used, under any and all conditions of time,

place and availability of accessories, such as towels, water, and such.

It must not soil or stain either clothing or hands.

If I may venture to suggest a substitute for the method now used by the military medical service that will be entirely adaptable to civil life, I would wish to call attention to the tincture of green soap, which is well known to be an excellent antiseptic even when well diluted with water; when applied to the skin in full strength, it is only slightly irritant. It can always be purchased, at any drug-store, at a moderate price. A small bottle can be easily carried and can be used under any and all conditions, and it will not stain or soil the clothes or hands. It will quickly destroy all ordinary organisms. I believe that it is best used diluted with from 50 to 75 percent of water, applied to the parts and left for some time before washing off. An injection is not necessary immediately after exposure, as the germs are still on the surface and do not enter the urethra for some time after exposure.

I do not advocate lax morals; but, the morals of many lead to diseases that go a long way in filling our institutions for the insane and the blind and the sick; these are maintained by taxing the public of which I am a very small part. I believe that the best remedy for the venereal-disease evil is, to educate the laity in the prevention of venereal diseases, for, we can do that; while I believe it would be difficult to attempt to supply them with morals which they never had.

LLOYD A. BURROWS.

Chicago, Ill.

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[In CLINICAL MEDICINE for May, 1917 (p. 374), there is an abstract of a report by Major Reasoner, Medical Corps, U. S. Army, according to which spirochetes of syphilis cannot live in a solution of soap, being promptly deprived of their motility and being killed by it. Other reports have been published, showing that the germicidal power of soap is marked. Hence, we believe that Doctor Burrows' suggestion is worthy of attention.

Certainly, it would be well if a method of prophylactic treatment could be devised that, at least, is likely to be employed. The messy calomel-salve applications, and similar disagreeable methods, may be all right, theoretically; practically, they simply will not be employed by the majority of people who need them.—ED.]

ENCEPHALITIS LETHARGICA

So much has recently been written in the newspapers about the appearance of Sleeping Sickness in various parts of Europe, and even of the United States, that the League of Red Cross Societies has deemed it advisable to call attention, through its *Bulletin*, to a few of the striking features of the disease, and to some of the popular misconceptions concerning it.

"In the first place", says the *Bulletin*, "The name 'sleeping sickness' should not be applied to it as this name should be used ony in connection with the African Sleeping Sickness known for a long time —a disease of absolutely different cause although resembling in some of its clinical features certain aspects of the disease now so much talked of in Europe. African Sleeping Sickness is epidemic in certain portions of tropical Africa, notably the West Coast, the Congo Basin and Uganda. After a long period of vague symptoms of ill-health, headache and remittent fever, a state of somnolence develops with gradually increasing weakness, torpor, swelling of the glands: the tendency to sleep becoming more and more marked, so that the victim often will fall asleep while eating or transacting business. Cachexia gradually develops and death is the ultimate outcome in the vast majority of cases, either from weakness or from a secondary infection, although certain preparations of arsenic seemed to have cured a number of cases if administered in the comparatively early stages of the disease. This African sleeping sickness is due to a special protozoon, the 'trypanosoma gambiense' which develops in the blood and, later, in the spinal fluid of the patient and which is transmitted by a certain variety of fly, the so-called Tsetse fly. While blacks are mostly affected and the population of whole villages may be entirely wiped out by the disease, the whites are not immune.

"The disease now so much discussed in the European press is absolutely different in origin and, for that reason, the name used to describe it should not be 'sleeping sickness' but 'encephalitis lethargica', the

name given to it by Von Economo when he first described it, in Vienna, in 1917; although it is probable that the disease had been present in sporadic form and not recognized before his description. Subsequent to Von Economo's report, cases were noted in various portions of Austria and Germany, and by Netter in France; while, in 1918, a fair number of instances of the disease were described in England and America. After a cessation for a number of months, there has recently been again a quite marked outbreak of the same disease, 'encephalitis lethargica,' in England, in America, in France, in Scandinavia, in Central Europe, in Spain, in Italy, even in Switzerland, but, as before, the cases are comparatively few in number although very widely distributed and they do not at all present the usual picture of a marked epidemic. While there are a few cases of great mildness and a few others of fulminating severity, the majority of the cases present a fairly clean-cut clinical picture, with, as their striking triad of symptoms, fever, of greater or less extent; paralysis of certain cranial nerves (notably those of the eyes and eyelids, so that ptosis or drooping of the lids is especially common) and a striking tendency to sleep, which usually is progressive, so that it is not unusual to find patients constantly in a sleep-like condition. Often, they can be aroused by loud shouting and may be relatively clear mentally after being awakened, but, they relapse into a state of somnolence almost immediately. The disease often ends fatally but recovery is by no means uncommon. Regarded at various times and by various observers as due to food poisoning, or as representing an unusual form of poliomyelitis or other disease of the brain and spinal cord, the most general belief at the present time is, that 'encephalitis lethargica' is an independent disease of infectious origin.

"The fact, that it is frequently present at the same time and in the same localities wherein epidemic influenza abounds, while at first causing many investigators to believe that the diseases are definitely related to each other, is now explained by most authorities on the basis that the diseases both develop under the same conditions but are independent. Whether an abnormal physical or mental condition consequent upon the war may be a factor, one cannot say, though there are some who believe that an increased susceptibility, or lowered resistance, due to these causes plays a distinct role. The studies done upon these cases seem to show that the disease really represents an inflammation of certain portions of the brain and nervous apparatus although, at the present time, the exact cause of this inflammation has not been definitely determined. Recently, a filterable virus has been obtained from the mucous membrane of the nose and throat of certain patients dying of this disease, and this virus seems to be able to reproduce, in monkeys and in rabbits, symptoms and lesions similar to those found in human beings. These same observers state that they have been able to grow an organism, by special methods of culture, which they believe is the cause of the disease, which requires an especially refined technique and which differs from others heretofore described.

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"At the present state of our knowledge, therefore, it would seem that 'encephalitis lethargica' is met with over a widespread area, but that it is only mildly epidemic and that it is slightly if at all contagious in the usual acceptation of this word; that individual susceptibility seems to play a distinct role in its incidence and possibly many persons harbor the causative virus, or microorganism, probably in the nose and throat, without showing any symptoms whatsoever; that no causal relationship between it and epidemic influenza has yet been demonstrated; and that its main symptoms are, fever, paralysis of certain muscles of the eye; and sleepiness.

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"With 'encephalitis lethargica' occupying such a prominent position in the press, it is obvious that many treatments should have been suggested, yet, at the present writing there is no recognized, specific treatment that offers any real hope of cure. After all, this is to be expected in the case of a disease the exact nature of which, as well as its method of propagation and dissemination, still are unknown, although it is probable that the infection is first localized in the nose and throat. On the other hand, recent work upon the subject gives us the distinct hope that, before long, our

knowledge of this disease will be materially increased and, after the discovery of its real cause is determined, one has a right to look for a possible and rational cure in the comparatively near future."

Very recently, American Red Cross workers in Vienna report an extremely serious outbreak of the disease among the children of Vienna. Lack of knowledge, no less than their almost complete lack of medicines, supplies and food, has so far almost nullified the efforts of the Red Cross physicians.

A CURATIVE AGENT IN INFLUENZA-PNEUMONIA

The time is not very distant when the mortality from infectious diseases will be almost nil. And, until such a time shall have arrived, the medical profession will continue to contend with "chiropractic" and other forms of quackery. Our mortality from influenza-pneumonia, while not very large, still does not commend itself to the general public—at least not to such an extent as to exclude the consideration of quackery.

The epidemic of this year, while not as violent, on the whole, as that of one year ago, still resulted in about as many cases of pneumonia as it did then. In a desperate case, after I had lost hope of the patient's recovery, I administered, intravenously, 100 million typhoid bacilli. About 30 to 60 minutes thereafter, a severe chill took place, the patient sweating very profusely. Within 24 hours, the patient appeared to be very much improved. The pulse, which had been missing every third or fourth beat, missed once in about 19 or 20 beats. The color, which was dusky blue, became natural and the complexion clearer. The lungs began to clear up from the apices down and contained more air. The temperature fell from 102° to 100° F.

The same dose was then repeated. A chill followed, as before, and this was again followed by profuse diaphoresis, the patient improving still more perceptibly. This improvement continued for about 72 hours, when I thought that the patient's favorable progress had ceased or that she was even retrogressing. I then repeated the treatment, giving 50 million bacilli. The chill followed, but, it was not as severe as formerly, the sweating, though, supervening the same as before. The patient was so much improved after this dose that I discharged her giving strict order, though, to keep her in bed for an indefinite period.

This patient was a woman, 30 years of age, rather obese; she had had influenza for about ten days when the protein was administered in the form of typhoid bacilli.

In another patient, about the same age and build as the former, who, while not as seriously affected with her influenza-pneumonia as the former lady, was quite ill, with both lungs considerably involved, and a color suggesting a beginning circulatory failure, a dose was given of 30 million typhoid bacilli, intravenously, on February 25. This was followed by a severe chill and the lady sweated all night, as in the case of the former patient, but sleeping "like a baby" most of the night. The patient lived a distance of 17 miles and, when I saw her again, 48 hours afterwards, her temperature was below normal all day, while she was resting well. I discharged the patient, leaving strict instructions to call on me in the event that she began to relapse. Her lungs had not yet cleared up to any marked degree.

I have never read or heard of any one using foreign protein in this epidemic intravenously and, while two cases do not count for much, still, as the epidemic in this part has subsided and I shall not have a good opportunity to test the treatment further, I have decided to give it to the profession for what it is worth.

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Three or four years ago I had a patient nearly dead with a relapse of typhoid fever. His eyes were crossed, his belly tympanitic, and he was passing bloody stools involuntarily and likewise was passing his urine. He was delirious and picking at the bedclothes, and his heart was irregular. I gave 100 million typhoid bacilli, intravenously, and the chill that followed was more like a convulsion than a chill. While the sweating was most profuse—in fact it seemed to continue for two or three days,—the patient made an uneventful recovery.

I am aware that this treatment has been used in a multiplicity of diseases among which are lupus, rheumatoid arthritis, gon-

orrheal arthritis and others, and I am fully confident that it will be found of great value in many conditions not yet thought of in this connection. It is up to us to develop this most promising field of therapy, for, owing to the fundamental character of its action, it is applicable to a very large variety of diseases.

M. Shadid

Carter, Okla.

[Among the editorial articles in this issue, there are two dealing with intravenous medication in general. The injection, directly into the circulation, of bacterial proteids, even though they may be "foreign" to the organism or to an existing infection, usually produces a tremendous reaction which ends in a notable stimulation of the autoimmunizatory process.

It is difficult of determine whether the typhoid bacterin, usually employed for the purpose, actually is "foreign" or "nonspecific" in view of the fact that far more people have passed through a typhoid-bacillus infection than are cognizant of it. However, this is a detail that does not detract from the interest of Doctor Shadid's observation.—Ed.]

OPEN LOCATIONS

A physician in Minnesota is looking for a partner. The applicant must be single, a Scandinavian, must have good surgical ability, and be able to do refraction. Also, he must be a good mixer. The field offers a $30,000 practice. Division is offered, to a good man, on the basis of fifty-fifty.

The town is a county seat of fifteen hundred inhabitants, near the borders of the Dakotas. It is a good, growing town, most of the inhabitants being Scandinavians. The doctor looking for a partner has a twelve-bed hospital. There is one other physician in the place who already has a partner. License in Minnesota is said to be a secondary consideration.

An Indiana physician, enjoying a $6,000 practice, in town and country, wishes to turn this over to a good man who would buy his property: six-room residence with garage built in, office on adjoining lot; centrally located in town of eight hundred. Good country and farming community good roads, the auto being used every day in the year. Good school and church collections ninety eight percent.

The doctor asks $3,000 for his property, which is $1,000 less than its value. He will introduce the purchaser and turn over the practice. He, himself, contemplates going to the city to take up a specialty.

HE WANTS A COUNTRY PRACTICE

One of our subscribers writes to say that he would like to find a country practice, unopposed, and situated in a prosperous village in Illinois. Anybody who can give this brother practitioner information that may be of service to him, may write to him in our care and we shall be glad to transmit the correspondence.

THE HARROWER PRIZE ESSAYS ON THE INTERNAL SECRETIONS

The Harrower Laboratory, Contest Department, Glendale, California, announces cash prizes amounting to $500.00, being offered to members of the medical profession and to medical students, by Dr. Henry R. Harrower, for a series of essays on the internal secretions.

The applications for admission to the contest must be received before July 1, 1920, and the contest will close August 15, 1920. Any information, serial entry numbers and application forms with full instructions, will be sent to those interested, on receipt of a stamped addressed business envelope.

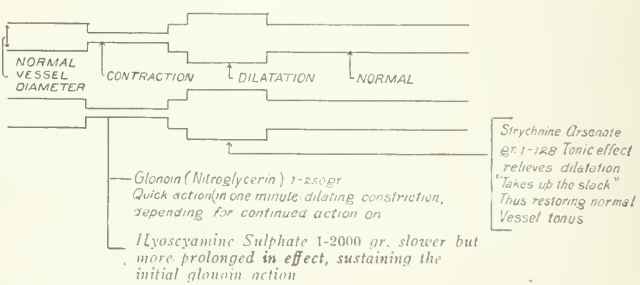
THE THERAPEUTICS OF COLIC

The unfortunate dependence on morphine for the relief of colic seemingly brings an unusual hardship on the profession in these days of antinarcotic legislation. In actual practice, however, it works out as a blessing.

Aside from the legal difficulties, the point is, that morphine is a feeble antispasmodic, while it may, and does, disturb the digestive function and, often, causes constipation. Even where it relieves the sense of pain, morphine so obscures the existing pathologic conditions that accurate diagnosis may become impossible. We refer to a progressive condition that may lead to hemorrhage, abscess, or other se-

rious condition. Frequently, morphine gives a false sense of security in relieving the prominent symptom of pain and smothering the hemorrhage or the symptoms of abscess. On the other hand, should the case prove a simple gallstone- or renal colic, a single dose may cure the condition thus rendering diagnosis unnecessary.

For eliminating the morphine that we have depended on in the past, we submit the following as preferable in every way. The fact is, that the acute abdominal pains, indicating uterine, ureteral or urethral colic, gallstone- or renal-stone passage, or intussusception, do not present the pathology of inflammation—as the condition has not existed long enough. Such pain


NORMAL VESSEL DIAMETER
CONTRACTION
DILATATION
NORMAL
Strychnine Arsenate gr. 1-128 Tonic effect relieves dilatation "Takes up the slack" Thus restoring normal Vessel tonus
Glonoin (Nitroglycerin) 1-250gr Quick action(in one minute dilating constriction, depending for continued action on
Hyoscyamine Sulphate 1-2000 gr. slower but more prolonged in effect, sustaining the initial glonoin action

yields to the pure antispasmodics rather than to morphine which is indicated in the pain of inflammation.

The exigencies of the case demand quick action. Diagnostic nicety is out of the question. In place of morphine, it is wiser to employ antispasmodic remedies, such as, a combination of glonoin and hyoscyamine supported by strychnine. The accompanying diagram outlines the pharmacodynamics of the formula suggested:

Here is scientific exactitude relating to other elements of treatment than diagnosis. This lesson in applied therapeutics recognizes the pathology of the condition and the prognosis coupled with the very essential knowledge of drug action. We submit that galenical therapy represented by nitroglycerin, tincture of hyoscyamus and tincture of nux vomica simply can not produce the pleasing results of the corresponding active-principle treatment. We would give a dosage like that indicated at ten-minute intervals, by the month, with water, and confidently expect good results after three or four doses have been ingested. The glonoin is oxidized in 15 minutes and the hyoscyamine and strychnine at most in an hour without any possibility of untoward action.

FRANK G. KIRBY.

Chicago, Ill.

SOCIETIES FOR THE STUDY OF ANESTHESIA MEET

At a meeting of the Board of Governors of the National Anesthesia-Research Society, held in Cleveland, last March, it was voted to have the annual convention of that society at Pittsburgh, during the week of October 4; this meeting to be in conjunction with that of the Interstate Anesthetists' Association and the Pennsylvania Medical Society. It is possible that the Western Pennsylvania Dental Association also will join in the meeting.

In order to augment interest in the primary purpose of the society, which is, research, the Governors voted $200 to be apportioned in prizes for the best papers on research in anesthesia, the papers submitted to be read at the national meeting. This offer is open to all students, surgical, medical, and to all dental practitioners in the United States.

A canvass of numerous hospitals having revealed the need for a uniform anesthesia chart, a committee of three was appointed to prepare forms for such a chart. The committee consists of Drs. A. F. Erdman of Brooklyn, A. H. Miller of Providence, and E. I. McKesson of Toledo. It was

also decided to prepare and publish, at the earliest moment possible, a monograph on the best practices in anesthesia in obstetrics.

NUNC ET TUNC

Dedicated to the B. P. O. Elks

When the outlook's dark and dreary,
When you're feelin' somewhat blue
When thoughts suggest that everyone
Has got it in for you—
You'll straighten up and be a man,
Your eyes will kind 'o fill,
If someone slaps your back an' says:
"Hello Bill!"

When everything is crosswise,
With your temper on a tear,
And you feel about as good natured
As a chronic-sorehead bear;
You'll just keep straight on growlin'
And nurse your wrath until—
Some Brother slaps your back and says.
"Hello Bill!"

When your Jecur's on a rampage,
When your Glossa's white as snow,
When your Spleen is in disorder
And you reel with vertigo (?)
You'll have slight need of tonics—
(Still less for B. M. Pill)
If someone slaps your back and says:
"Hello Bill!"

The measure of The Golden Rule
Is ours to teach and follow:
Without this rule, our every act
Is pretense, rank and hollow.
"We pass this way but once," we know
'Tis ours all good to will—
Then here's to him who slaps our back an' hollers:
"Hello Bill!"

Some day we'll leave this good old world
And travel to another;
Right there and then, the Antlered Herd
Will know us as a Brother.
To them, we'll lisp the well-known word,
With love our hearts will fill—
When the chaplain, there, will breathe a prayer and whisper:
"Hello Bill!"

"Anonymous."

THE JOHN YOUNG BROWN MEMORIAL FUND

It is the desire of the friends of the late Dr. John Young Brown to show their appreciation of him as a physician and a true American by establishing the John Young Brown Memorial Fund, the purpose of which will be, the foundation of the John Young Brown Memorial Library, in St. John's Hospital, St. Louis, of which Dr. Brown was chief surgeon at the time of his death.

As president of the Mississippi Valley Medical Association, Doctor Brown filled the office with distinction, and, not only was his record an enviable one, but it was the sort that will be held in the memory of each member with that degree of affection that only a commanding personality receives.

It is needless here to state the heights to which Doctor Brown rose as a surgeon or his contributions to medical literature; both are well known. Nor need his kindly offices on behalf of all beginners in medicine be expatiated upon here. The man and physician were closely bound up; the many qualities of the real man and the unusual qualities of the physician.

Contributions to the John Young Brown Memorial Fund should be sent care of Dr. Wm. Englebach, University Club Building, St. Louis, Mo., and made payable either to Dr. Englebach or to the John Young Brown Memorial Fund.

Wm. Engelbach
Fred W. Bailey
Percy H. Swahlen
Members of Committee.

St. Louis, Mo.

AN INVITATION TO NORTH CAROLINA

I most cordially invite you to spend your vacation at my home in this good town, or at my country home and farm of 1,300 acres, some fifteen miles out, but reached by a good hard road all the way.

You would get the prettiest scenery, across the mountains of Pennsylvania and West Virginia, on the American continent. You can come by Washington, which is worth your while. Richmond, Virginia, is worthy of a day or so, but Durham, North Carolina, beats them all.

I go to Niagara and Quebec the last of June to middle of July, but, come then if you like. Will give you carte blanche with superintendent of my farm, and he will see that you enjoy yourself, but, I should rather be home and give you royal welcome.

This is genuine Southern hospitality and I mean every word. Bring along all the friends you wish. My farm is free of

mosquitoes. You can camp, or occupy the house if you like.

If interested, write for further particulars.

E. H. Bowling.

[Thank you, Doctor Bowling, that is an invitation worth having and, who knows, one that we may be able to accept, one of these days. This editor has lived six years in North Carolina, but, only in the western part of the state, in Asheville. We always had entertained a great desire to see the rest of that grand old state.—Ed.]

AN OLD FRIEND—DR. MILTON CHASE

It has always been a matter of conscience with Clinical Medicine, the tradition having been taken over from the old Alkaloidal Clinic, to honor our old friends and to pay respectful tribute to those who, after many years of active practice, have retired to rest. Sometimes, it is possible to express our affection and esteem, in words, to the living. Often, more is the pity, we can but print a kindly remark after they have entered into their eternal rest.

One of our old friends who still is hale and hearty, although advanced age and, as he tells us, increasing forgetfulness have caused him to retire from active practice, is Dr. Milton Chase, of Voorheesville, New York. The doctor recently sent us the picture, reproduced on this page, which was taken last February. He adds the information that he is eighty-one years of age; was a surgeon in the Civil War for three years; and practiced medicine for fifty-four years. He retired because of forgetfulness, as he did not wish to "kill babes by overdosing." However, he possesses excellent physical health.

We wish for Doctor Chase, a peaceful and happy eventide of life.

ELECTROTHERAPEUTIC WEEK, IN KANSAS CITY

The week of May 24th has been selected for the second postgraduate course of lectures on Electrotherapy, by Dr. B. B. Grover, of Colorado Springs. The lecture course will be followed by the annual meeting of the Western Electrotherapeutic Association, May 27-28, at the Little Theatre. A number of men of national reputation will present papers.

Charles Wood Fassett, Sec'y.
Kansas City, Mo.

Dr Milton Chase.

A NOTE ON THE VALUE OF NITROUS OXIDE-OXYGEN ANESTHESIA IN WAR SURGERY

Reporting, to the Southern Medical Association, on his experiences with anesthesia in war surgery, Dr. Addison G. Prenizer, of Charlotte, North Carolina, formerly Chief of Surgical Service, Base Hospital No. 6, A. E. F., says that nitrous oxide-oxygen was used only between September 10 and November 14, 1918. Not, that the surgical staff did not prefer it, but, because the Unit was late in receiving its apparatus and was not able to secure

more gas when the first supply was exhausted.

In his published observations (*Southern Med. Jour.*, Oct., 1919), Prenizer explains that:

"During the 65-days period anesthesias were given as follows:

Ether	473
Nitrous Oxide-Oxygen	341
Local	87
Chloroform	7
	908

"We have used ether overwhelmingly over other anesthetics, quite a number of infiltration anesthesias with procaine and cocaine and but little chloroform. We have rarely used ethyl chloride as a general anesthetic, but have used it locally for small incisions. There was but one death that we could attribute to an anesthetic and that was a death from chloroform given by an unskilled assistant.

"The tranquillity of the patient, the rapidity and ease of induction, the rapidity of recovery and the safety, withal, give to nitrous oxide-oxygen quite an advantage over the other anesthetics in the first and second stages of anesthesia, especially in cases where an absolute muscular relaxation is not needed. Even when ether is superimposed for deeper anesthesia, the amount is reduced to a minimum to maintain the period of relaxation.

The types of cases where gas-oxygen is most valuable are:

"1. Shock cases.

"2. Cases where operation is to be of short duration.

"3. Cases where the condition is profoundly bad and the postoperative period treacherous.

"4. Chest cases, with the exception of those liable to show hemorrhage, and

"5. Infection of the respiratory tract.

"Gas-oxygen is of great value in war surgery since the greater number of delayed primary and secondary suturings of wounds can be made with the use of this anesthetic alone.

"The special advantages of gas-oxygen in war surgery are:

"1. Ease and rapidity of inducing anesthesia, thus preventing a struggle, enabling the immediate beginning of the preparation of the field of operation and the carrying on of several parallel operations without the one disturbing or distressing the other.

"2. Rapid recovery and rapid exchange of patients between operating room and ward.

"3. The relief from the care of recovering patients on the wards and the consequent liberation of the personnel for other duties.

"All these points are important when the large number of secondary wound closures are considered, there being as many as sixty in a single day.

"The comfort of the patient is a decided point. There was no death nor injury from this anesthetic."

F. H. McMechan

Avon Lake, O.

ALONE!—BUT THE DOCTOR'S THERE

The way of life is rough and steep,
Yet, a woman climbs it alone,
From the cradle's side
To the last dark tide
That is crossed in the arms of sleep
Alone!—but, the Doctor's there.

The courts of pain exact their toll
While the gates of Life swing out:
From the spirit land
To a mother's hand
Comes the gift of a new-born soul.
Alone!—but, the Doctor's there

A mother sits with tear-dimmed eyes
While her boy faces shot and shell
In a war-torn land,
Till his last brave stand
When he falls on the field, and lies
Alone—but, the Doctor's there.

An outcast falls by the wayside,
Despised and neglected by all;
In our human faults,
Humanity halts
And leaves us our sorrows to hide
Alone—but, the Doctor's there.

The Doctor's there, from first to last,
Where no one else will go.
In the soul's distress,
When the lips express
What God alone knew in the past.
Though alone—the Doctor's there.

H. S. Bennett

Washington, D. C.

CAMPHORATED OIL HYPODERMICALLY

Have just had a case where a man had second attack of Bright's, developing bronchial pneumonia and pleurisy on the fifth day; all hope gone; we used camphor

ated oil, hypodermically, and, two hours after administering three doses, I noted a decided improvement; in ten days, he was up in a chair for two hours. I wish you would publish an article on camphorated oil, used hypodermically.

(Miss) Sara A. Brewer.

Rockland, Maine.

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[This interesting note from a nurse is worth heeding. We share her wish to have an article on the hypodermic use of camphorated oil. This remedy used to have a great vogue in the treatment of pneumonia. Has it been superseded? Has it lost its efficacy? We should like to know from the readers of Clinical Medicine. Now, who will write that paper? Don't speak all at once, though we shall not object to several articles on the subject.—Ed.]

"LOCAL VERSUS GENERAL ANESTHESIA"

Under the title indicated here, there appeared an interesting article in Clinical Medicine for March, on page 202. Unfortunately, the author's name was omitted. Please take down your copy for March, Doctor, and enter, on page 203, where the asterisks are, the author's name, Joseph L. DeCourcy, Cincinnati, Ohio. We regret this oversight and take pleasure in crediting the article in question to its author.

ALKALOIDS—AND OTHER REMEDIES

It is my intention to remain with you. As to suggestions for improving Clinical Medicine, I should relish rather more of the experience of clinicians in the use of alkaloids. This has not been exhausted, I believe. In contrast with newer medicaments, there is, usually, a logical indication for the work that they will do; providing it be possible, in a given case, that anything can be done at all. They are unchanging in potency, if proper care has been taken of them. They are convenient and compact to carry about "doing good", and they are not over-high in price, even to a doctor of very moderate income. I believe I know what I know whereof I have written; even though the limits of what I do know are very narrow, because an extended opportunity has not been mine.

Antitoxin, for instance, will do a piece of work beyond the ken of the doctor as to the way it does it. The list of this and similar agents should have its limits, since pure alkaloids enable doctors to benefit by the experience of the ages. Don't you think so?

J. R. McMillan.

Cincinnati, Ohio.

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[The range of action of most plant remedies has been, or is being, determined with great care experimentally and also clinically. From the viewpoint of the clinician, there are few investigations equal to those that we owe to the Eclectics, to whom our thanks are due for invaluable information concerning the action and effects of, as well as indication for, most American plant remedies.

Of recent years, the pharmacological laboratories associated with the larger medical schools in our country have taken up the study of drug action, particularly with reference to the action of the alkaloids, and a great deal of information is being collected that will assist materially in revising and completing our knowledge of these meritorious remedies.

We are with Doctor McMillan in his faith in alkaloids and similar drugs. However, we can not quite agree with him in his exceptions to antitoxin and its congeners. Surely, the list of biologic remedies should, and does, have its limits, but that is very natural since most of them are specific and, therefore, delimited in scope.

We agree with Doctor McMillan cordially when he says that he will relish rather more of the experience of clinicians in the use of alkaloids. Amen, and let it be so. Only, as we have said often, that is up to the doctor using the alkaloids. We must depend on him for information. Let us have it, please, and watch us print it.—Ed.]

LETTERS FROM FRANCE—XX*

The proposed league of Red Cross Societies, which has for its purpose the association of the Red Cross Societies of the world, to fight the misery produced by dis-

*It is to be kept in mind that this letter was written several months ago.—Ed.

case and calamity, has now been organized on a definite basis, with its headquarters to be situated at Geneva, Switzerland.

The Board of Governors, which will hold office until a general council is convened and, consisting of members of Allied Red Cross Societies, has just held its first meeting in Paris. The Board consists of: Mr. Henry P. Davison (America), who was elected chairman; Sir Arthur Stanley (British), Comte Kergorlay (France), Count Frascara (Italy), and Professor Ninagawa (Japan).

Mr. Davison, the chairman, was, until recently, chairman of the War Council of the American Red Cross, and, since January, has been chairman of the Committee of Red Cross Societies, which formulated the program for the league.

The objects of the Red Cross League are:

1. To encourage in every country a Red Cross organization, the purpose of which will be, the improvement of health, prevention of disease, mitigation of suffering, and to secure the cooperation of all organizations prosecuting these purposes.

2. To promote the welfare of mankind by furnishing a medium for bringing within the reach of all peoples the benefits of science and medical knowledge.

3. To cooperate in relief-work in cases of disaster.

The league is the outgrowth of plans that have been developed by the Committee of Red Cross Societies during the past five months, and by a conference of some of the leading medical experts of the world held at Cannes in the early part of April. The five Allied societies that have founded it will invite other societies to join as members.

The control of the League will be by a general council composed of representatives from all member societies, and meeting at stated periods. In the intervals between these meetings, the control of the League will be exercised by a governing board of fifteen members elected by the general council and two ex-officio members.

Speaking at the meeting of the Board of Governors, Mr. Davison, the Chairman, said: "The Red Cross Societies of the United States, Great Britain, France, Italy, and Japan have, for several months, worked to devise an agency that could cope with world-problems of disease and disaster. From the outset, it was clear to us all that there was no institution in the world so well adapted for this task as the Red Cross." The Board authorized immediate steps for carrying out the purposes of the League. It selected Geneva, the home of the International Red Cross, as the seat of the Headquarters of the League.

It is expected that the League of Red Cross Societies will establish intimate relations with the League of Nations and with the various Governments of the world; still, the League is a purely voluntary organization and has no statutory connection with the League of Nations or with any Government. The purposes of the Red Cross League are recognized by the League of Nations, as expressed in Article XXV of its Covenant.

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The Red Cross League has not had to wait long for occasion to test to the fullest its working-ability. With the purpose of devising a plan to combat the epidemic of typhus, which has reached serious proportions in southern and eastern Europe, the Supreme Economic Council has appointed a committee of British, French and Italian representatives to confer with representatives of the League of Red Cross Societies to prepare a definite scheme for submission to the respective Governments. The Director General of the League has been in conference with the Supreme Economic Council regarding the situation and the necessity for immediate action on a large scale.

Although the League of Red Cross Societies was officially organized only a few weeks ago by representatives of the Red Cross Societies of England, France, Italy, Japan, and the United States, it has had under consideration methods of dealing with the present typhus-epidemic, as approved by leading scientific experts who met at Cannes, in April, [1919] at the invitation of the founders of the League.

Reports from Poland and from other parts of eastern and southern Europe picture the suffering there as beyond comparison. Thousands are dying for lack of medical care, while there is a serious scarcity of all medical necessities. The menace to the rest of the world is fully appreciated by the Supreme Economic Council, which has received reports from various sources regarding the rapid spread

of typhus and the necessity of taking immediate action. Added to the menace of typhus, is the danger of an epidemic of cholera in Europe, and the Red Cross League will be consulted in regard to this feature of its program.

Sir David Henderson, director-general of the League, said: "If the Red Cross League is charged with the serious responsibility of protecting the public health in this crisis, the people of the various nations must realize that the fight is their own and that the League is acting as their instrument. The League will be put to the severest test at the very beginning of its existence. We believe that, with the aid of voluntary national societies supported by the people, we can control and limit the spread of the epidemic.

"The situation in eastern and southern Europe is too serious to be coped with by any single Government or by any voluntary society. The Red Cross League affords a medium through which the governments and the voluntary societies can cooperate and by means of which efforts may be coordinated. The League has at its disposal the assistance of the most-expert medical advisers, trained by practical experience in combating typhus. It has ready the help of the trained personnel of the British Red Cross and the American Red Cross, both of which societies already have units in the field, and it can call for aid upon the other Red Cross Societies, members of the League. It will be able to utilize, under expert direction, certain medical and other supplies, now in Europe, of the Allied Governments and the national voluntary societies.

"The League is prepared to undertake the strategical direction of the campaign. If the League is requested, by the respective Governments, to undertake this work, it will offer the opportunity to the people to show, through their national Red Cross Societies, their practical interest in the common welfare. The future will depend upon the response made to that appeal. The League has no thought of overriding national societies; on the contrary, it seeks to cooperate with them and to develop and stimulate them."

The death of Dr. Edvard Berg, director of the Institute Suédois de Kinésithérapie at Paris and of the section of Mechanotherapy at Evian-les-Bains is reported. Doctor Berg had been in poor health for more than a year, his vitality having been undermined by his incessant work during the war at the military hospital in the Grand Palais, where the kinesitherapy-department, which he founded, organized, and supervised continually in every detail, has rendered services of intestimable value in the reeducation of hundreds of maimed and disabled soldiers. He died at Lausanne after a serious operation. The funeral took place in Paris. Doctor Berg was 49 years of age. He was one of the leading and most-highly esteemed members of the Swedish colony in Paris. Many of the mechanical instruments invented by him have been adopted by the French Ministry of War, for application in the schools established throughout France for the teaching of trades to soldiers crippled in the war, Doctor Berg having waived all patent-rights on his inventions and placed them freely at the service of the maimed "poilus" of France. Several French and foreign decorations had been conferred upon him, in recognition of his eminent services in the cause of humanity. He was an art-connoisseur and had formed, at his residence, in the Avenue des Champ-Elysées, a remarkably fine collection of modern paintings.

B. Sherwood-Dunn.

Paris, France.

WEAK HEART ACTION IN INFLUENZA—ELECTRIC SHOCK

While treating several cases of the "flu" here, this winter, I have observed some points not mentioned in any articles that I have ever seen on the subject. In the fall of 1918, I treated over 300 cases in Southern Minnesota, and, while I noticed a peculiar weakness of heart action, in old persons, I did not devote to it the attention that I have given it here. I have observed that elderly persons, even when but slightly indisposed with "flu" symptoms, have a very irregular and, also, intermittent heart action. In several of these cases, there was no increase in temperature, and, in some, there was subnormal temperature. There was slight pallor and body weakness in proportion to the heart inability. Neither digitalis nor strychnine seemed to correct the heart symptoms.

but, drinking two glasses of pure water restored the heart action to almost normal in less than one hour. However, the effect was not permanent.

Another observation made here was the efficiency of large doses of quinine in the beginning of pulmonary congestion. Where "flu-pneumonia" seemed imminent and the symptoms fierce, 10 grains of quinine, repeated every four hours, gave surprisingly good results in several cases.

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A man was found dead in a bathtub here a short time ago and the physician reported it as "heart failure." An investigation showed that the man died from an electric shock. It was found that a chain-pull switch on the light-bracket, just over the bathtub, gave a distinct shock to one who stood on the damp floor near the tub. The tub was then partly filled with water and a small wire from the chain was dipped in the water. The wire became hot and the fuse was burned out instantly.

This incident should serve to draw attention to the fact that a person, bathing in a bathtub which is connected by metal pipes with the earth, runs great danger of electrocution by touching any part of a light-circuit.

A. D. Hard.

Long Beach, Cal.

DEAR BROTHER BILL

Dear Brother Bill,
  My glass I'll fill
With water cold and clear.
  A silent toast
To the silent host
  Of the friends who are not here

The barefoot boys
  With their games and toys
About the little school:
  When class was out,
Then, how we'd shout:
  "Now for the swimming pool!"

Wee Nellie Fry
  Who'd always cry
At the "Charge of the Light Brigade;"
  And Mollie Lamb
Whose Ma made jam
  And delicious marmalade.

Gay Marie La Clair
  Who raced Jim's mare
At the picnic at the glen;
  And Crazy Dunn
Who owned the gun
  That killed poor Micky Denn

Dear Aunty Belle
  Who'd fortunes tell
When e'er we used to call;
  And the wild grape vine
That grew so fine
  Along the o'd stone wall

We vainly long
  For days that are gone,
They'll come to us no more.
  We may dream in rhyme
But, we can't turn time
  Back to the schoolhouse door.

We've each our load
  And are on the road
To somewhere, so they say;
Though, we've each an aim,
Yet it's all the same;
  So, be cheerful on the way.

Through the life-long miles
  It's the jokes and smiles
That keep our joints from rust.
  When we are in need,
'Tis the kindly deed
  That teaches the soul to trust

Dear Brother Bill
  I've had my fill
Of the world and its heavy care:
  But, I'm mighty glad
That I've also had
  Of its joys and laughs a share.

Eddy S. Haswell

Albany, N. Y.

REMINISCENCES OF AN OLD VIRGINIA DOCTOR

Scarlet Fever and Diphtheria in Country Practice Many Years Ago

I first saw light on the fourteenth of December, 1840, in the county of Botetourt, Virginia, and was raised as a farmer's boy. I worked on the farm until the spring of 1861, when the volunteer company that I belonged to went to Lynchburg at the call of Virginia. We were mustered into the service of the Confederacy as Company A, 28th Virginia Volunteer Infantry, and, for four years, I followed General Pickett.

After the surrender, I returned to my father's home and went to work on the farm, but, my old wounds that I had received during the war were of such a na-

ture that I had to give up farm work. So, I went to school, taught and, at the same time, read medicine, graduating in medicine on March 6, 1869, from the Medical College of Virginia. I have been doing country practice ever since my graduation, excepting some eighteen months of railroad practice, from the Kanawa Fall to Bowyers Ferry, while the C. O. R. R. was under construction.

Since the time when I commenced to practice medicine, fifty years ago, I find a radical change in the practice of medicine and the preparation of medicines. The doctor of that day had to carry all his medicines with him, as there were but few drug stores. He had to keep a good supply of drugs of all kinds, having his saddle pockets and, also, his coat pockets filled with powders, tinctures, ointments and so forth. He had to make his own pills, solutions and mixtures at the bedside. Although he always had a good selection of drugs with him, he would, often, find that he did not have just that remedy on hand that he needed in the case under treatment.

Today, we can carry all that a country doctor needs, in cases of emergency, in his coat pockets. Now, we have good first-class drugstores handy and, instead of nauseous concoctions or bitter powders, we can give our patient a few nice little tablets, pills or pellets.

Scarlet Fever Thirty-six Years Ago.— During the fall of 1884, we had an epidemic of scarlet fever in this section. In October of that year, I was called to see a little girl who, I found, was well broken out with scarlatina. She had not been away from home, nor had she been exposed to scarlet fever, and there had not been any cases of that malady in the section for years. The next day, I was called to see another little girl, about two miles east of the first case, who presented a well developed case of scarlet fever. She had not been exposed to the disease. The next day, I was called to see a little idiotic child, with cleft palate and deformed in other ways, about five miles west of the first case. Here, also, there was a well developed case of malignant scarlet fever. None of these children had been exposed in any way and all lived in different neighborhoods. From this time on, I saw many new cases; treating, in all, over one hundred patients with scarlet fever during that fall and winter, with only three deaths. The first case was that of a patient of another physician. The patient had the most malignant form of scarlet fever and was moribund, dying twenty-four hours after I first saw the child. When I went to assist the doctor, he walked out and would have nothing to do with the case. The whole throat was blocked with diphtheritic membrane, and an abscess that had formed broke on the outside.

The second case of death occurred in a little negro child, who was dying when I arrived. Death supervened six hours after I was called.

The third death was that of the idiotic child three years old, with cleft palate, and deformed. It died on the fourth day. This was a case of malignant scarlet fever and was fully developed when I was called in.

In that epidemic, I had all grades of the disease from the mildest form of scarlet rash to the most malignant form.

The treatment then was quite different from that of the present time. We knew nothing of antitoxin or any of the remedies in use today. I used Watson's chlorine solution as a wash, gargle and internally, according to the age of the patient. Quinine, tincture of iron chloride, chlorate of potash, calomel, podophyllin, castor oil, and so forth. I used turpentine and cream to swab out the throat. In other cases, I used fat bacon punctured and saturated with turpentine, applied to the throat. I also used a coffee- or teapot filled with hot water not quite up to the spout, prolonging the latter with a piece of writing paper or some stiff paper and placing a cloth over the top of the pot. Chlorate potash or sulphur was mixed with the hot water and the patients were instructed to suck the steam into their throats. This was continued for ten or fifteen minutes at a time and repeated every two or three hours. If the patients were too young to steam their throats or use a gargle, I had the nurse to mop out the throat with a camel's-hair throat brush, using Watson's chlorine solution, chlorate of potash or some astringent. I also used heart tonics of some kind and ordered a nutritious diet.

Now, I administer antitoxin wherever I see any diphtheritic membrane; with qui-

mine and iron also, I give a supporting treatment to build up the system. Wherever there are any signs of diphtheria, I use antitoxin as a curative and a preventive.

In looking back over my long practice I cannot see that I have lost by death from scarlet fever and diphtheria over ten or twelve patients, though I have treated a great number of cases. I do not claim this was due to my skill, for, it was the guiding hand, that aided in giving me the success I have had in treating these diseases.

J. K. SIMMONS

Nace, Va.

[It is well for us, occasionally to be reminded of the ways and means of long ago. Even then, chlorine-bearing preparations were recognized as valuable, we hope that Doctor Simmons will tell us more. How did he treat typhoid fever, for instance?—ED.]

A FEW THOUGHTS IN INDUSTRIAL MEDICINE AND SURGERY

Industrial surgery will, I believe, in the very near future, demand and receive more attention and special study than many of our leading surgeons seem inclined to give to it at the present time.

Industry is forging ahead and managers and directors of these large industrial plants are coming to realize more and more the need of cooperation with their men in every way possible.

One of the best ways to help obtain this cooperation is, to show the men that special attention is given them in providing the best-possible medical, surgical and hospital service; health being paramount to all other considerations.

At the writer's suggestion, the C and O Lumber Company of Chicago, San Francisco and Brookings, has posted "safety first" signs in conspicuous places about its mills, railroad shops and logging camps, cautioning the men to be careful; reminding them that they suffer most, both physically and financially, in case of accident, and asking suggestions for any improvement of safety devices or appliances or methods of handling dangerous work.

Since these notices were posted, a few months ago, the accidents have dropped off very materially, or, to be more exact, about 30 percent, and this, during the storm period of the year when, normally, the accidents increase about 25 percent or more. The notices are constant reminders to the men that the Company is interested in their welfare and wants to protect them in every possible way.

The old method of employing any old physician who happened to come along, just because he was cheap or had a "pull," is getting to be a thing of the past, most managers and directors insisting at the present time on capable, well-qualified physicians and surgeons, and they realize that it pays.

In Oregon, the employing of only competent men to look after these industrial plants, medically and surgically, is not left entirely with the corporations as there is a provision in the State Compensation Law which gives to the State Industrial Accident Commission power to remove any physician or surgeon from an industrial position who proves incompetent or negligent. This is a great protection to the laboring men and is a feature that should, in my opinion, be embodied in the Compensation Laws of every State. The best is none too good for the sick and injured.

Much improvement has been made during the past few years in handling the industrial-accidental injuries and especially great have been the lessons derived from treating the wounded in the recent World War.

A few years ago, you seldom heard of, or saw, an accidental injury that did not develop an infection in some form, and, many times, in a most virulent form. It is granted that we always shall have infections of some degree, in some accidental injuries, but, it has been proved that, with proper care and treatment at the first dressing, especially if early attendance is possible, a very large percentage of these infections can be prevented.

As a case in point, I refer to J. H., age 30, who was struck on the top of the forehead by the swinging arm of a locomotive crane, tearing the scalp off the entire top of the head and down nearly to the base of the occiput, and leaving the bone as bare as if it had been cleaned with a meat block scraper. He was thrown from the crane, head first, into a ditch of dirty water, the wound and scalp being pounded full of dirt, sand and grease. The man was

unconscious only a short time and arrived at the hospital about three hours after the accident, which happened quite a distance up in the mountains. At least two hours was spent cleaning this wound of every particle of dirt, and under a constant bath of chlorazene; it was then carefully sutured, using catgut for the inner layer of the scalp and horse hair in the outer layer of sutures; the first dressing was moistened twice a day with chlorazene solution and removed at the end of a week; the sutures were removed at the end of ten days with not even a stitch abscess.

I always have taken an unusually long time with the first dressing in all accidental injuries and, as a result, never have had a serious infection and very few cases of even mild infection since using the chlorazene solution. In a large number of amputations of fingers, toes, feet and hands, the same good results have attended the use of the chlorazene with absolutely no untoward symptoms from its use.

Too many injuries are treated hurriedly, sometimes for one reason and sometimes for another; but, mostly, I believe, in cases where the injured are paying monthly hospital dues; many times, these patients do not receive the consideration that is given private patients. This is a wrong principle, because a contract man, I believe, is entitled to first consideration, as he is constantly paying for this service.

However, the main point that I wish to bring out is, to insist on plenty, PLENTY, PLENTY, of time and care in cleaning an injury, already at the first dressing, and, then to use the proper dressing.

The results all depend on making and keeping the wound as sterile as possible. *Make haste slowly in dressing accidental injuries.*

DR. C. H. LAW.

Brookings, Ore.

HOW MANY MEDICAL MEN AND SCIENTISTS HOLD WRONG CONVICTIONS?

There obtains a tenacious conviction among pharmacologists, pharmacists, and physicians that caffeine increases the toxicity of acetanilid and its coaltar relatives. This widespread fallacy appears to be founded almost exclusively upon the monograph by Worth Hale, titled "The Influence of Certain Drugs Upon the Toxicity of Acetanilid and Antipyrin," and published at Washington by the Hygienic Laboratory.

And, what are the statements made by Mr. Hale, which persuaded chemists, pure-food guardians, doctors, pharmacologists, and others to jump with one leap into the band-wagon of enemies of acetanilid and caffeine combinations? I submit that Mr. Hale himself never encouraged this epidemic of erroneous belief.

Perhaps, one of the unrecognized origins of the delusion, that caffeine renders acetanilid much more toxic, is founded upon the fact that headache-remedies, such as acetanilid compounds, have largely curtailed the doctors' calls and, in a measure, are competitors of the practicing physician. He and his friends, therefore, are ready for any conclusion that will cast discredit upon the headache-remedies containing acetanilid and caffeine.

What, then, are the facts from Worth Hale's monograph, many times indirectly quoted, yet, seldom read? I shall use his own statements to disprove the false belief that caffeine renders acetanilid a dangerous poison.

Worth Hale published his monograph in 1909, when he was assistant pharmacologist of the Hygienic Laboratory, U. S. Public-Health and Marine-Hospital Service. That was ten years ago. Much water has rolled under the Brooklyn bridge since then. Tens of thousands of pounds of acetanilid associated with caffeine have been swallowed each and every day, since then, by all sorts and conditions of people, in various degrees of feeble or good health.

I, myself, have written hundreds of prescriptions calling for acetanilid-and-caffeine compounds and, in that time, have taken this mixture myself; yet, never a mishap has occurred. The reason for this is stated by Hale, himself, by Osler, Anders, Potter, Hare, Hatcher, Wilbert, Wood, and also by *Useful Drugs*, by *Pharmacology*, and by contributors to *The Journal of the American Medical Association*.

Here, then, are Hale's exact words in his summary of results—the italics and dashes being mine:

"The results of the (few) experiments on mice—which are recorded in this bul-

cein, indicate that the *slight* deleterious effect of acetanilid upon the heart is *very imperfectly antagonized* by caffeine. They show that, so far as the contractile power of the heart is concerned, the antagonism *is* very weak or even not present at all, and, *in some cases*, that the two drugs *seem* to combine to depress the heart to a greater degree than acetanilid does when given alone. The heart rate, on the other hand, is not slowed after a mixture of acetanilid and caffeine is given, as is the case when acetanilid is given alone, and the decreased heart rate following the exhibition of the former alone tends to become normal upon the subsequent injection of caffeine.

"Caffeine is further shown to increase the toxicity of acetanilid mixtures, when given to the intact animal, and, in certain experiments, this is, not only a summation-effect, but, even some synergestic action is to be observed."

Depression of the heart is not at all a poison-state. Mr. Hale seems to think so. It often is desirable and necessary to give foods or drugs to depress the heart. Look up the word.

Depressant action on the higher parts of the brain, the senses, the heart, is your aim when you administer headache-remedies "or give relief to neuralgia, brain-fag or exhaustion". Mr. Hale continues: "Sodium bicarbonate, quite in contrast, appears to lessen markedly the poisonous effects of acetanilid upon the heart, which is shown to be less depressed than when the alkali is not given."

Is it not strange that Dr. Harvey W. Wiley, the American Medical Association, the pharmacologists, and others that were so quick to spread the false gospel of caffeine-acetanilid being dangerous should ignore, forget or deliberately pass by Mr. Hale's favorable statements about these headache-remedies; namely, that "sodium bicarbonate, quite in contrast, appears to lessen markedly the [alleged] poisonous effects of acetanilid upon the heart"?

The benefits and comfort given to suffering mankind by the effervescent headache-remedies composed of acetanilid, caffeine, and sodium bicarbonate are stated frankly and dogmatically by Mr. Hale in these words:

"The lessened toxicity also appears in the experiments upon the intact animal, in which case, acetanilid, when given alone, proved to be far more toxic than in mixtures with the alkali."

The militant moralists among the chemical purists forget Darwin's dictum "Always write down facts which you dislike or which go contrary to your plan of reform, otherwise, they will drop out of your consciousness and you will be unjust in your preachments."

On page 16 of his monograph, Mr. Hale admits the unfairness of his conclusion against caffeine and acetanilid taken in combination, saying:

"In the series [of experiments], it becomes impossible to draw absolute conclusions. The results, as they stand, however, indicate considerably more toxicity upon the heart from the drugs when exhibited in combination than from acetanilid alone.

"These experiments are also somewhat disappointing," admits Mr. Hale on page 17, "because of their failure to show striking modifications in action. It seems possible, however, in going carefully over the results obtained in this manner, to point out certain definite changes. In five experiments, there was clearly a lessened toxicity as a result of using the drugs in combination—caffeine with acetanilid. In fourteen experiments, the drugs were exactly the opposite. The rate was lessened in five, *and, in the others, there was no change.*"

Hale does his utmost durndest, as if with a preconceived plan to prove acetanilid-and-caffeine compounds to be wicked; but, truth is mighty and will prevail; so, he says:

"*It must be admitted that the charges are not very definite*, but, as in the result obtained by the other method, there are some indications of increased toxicity from the combination."

To cap the climax, he uses an equivalent of about 1800 grains of acetanilid to the body-weight of a man of 100 pounds! I once saw a child eighteen months old swallow 42 grains of acetanilid, with nothing other resulting than cyanosis, followed by recovery after hot-coffee enemas and fresh air; still, I should dislike to experiment with 1800 grains given to a man of 100 pounds.

On page 25, anent his experiments with dogs, Hale says: "As regards the rate, caf-

remedy proved to be completely antagonistic when injected at the same time, usually preventing any slowing and, when injected subsequent to an injection of acetanilid, it causes the heart rate to return at once to normal or, in some cases, to a rate more rapid than normal."

Evidently, it is high time to call a halt upon another medical fallacy as serious as the discredited bogies of the "uric-acid diathesis," the "touch of malaria," the belief in biliousness, indigestion, and a raft of similar absurd fads and erroneous theories.

By his own researches, Hale proves that acetanilid, caffeine, and sodium bicarbonate are relatively harmless and, moreover, excellent remedies. Will these facts be able to catch up with the false propaganda, the scandalous gossip and the mistaken notion to the contrary? I doubt it.

LEONARD K. HIRSHBERG.

Baltimore, Md.

DO NOT BE TIMID IN THE USE OF ANTITOXIN

In many localities throughout the country, there have been cases of diphtheria dating back to last spring and beginning about the time the "flu" ended. In some instances, there was only one case, in others, several cases, but, nowhere has it assumed an epidemic. It was feared by many people that it would spread over wide areas of territory as it followed so closely upon the wake of the "flu." But, in each instance, as far as I could learn, the physicians in charge promptly reported its appearance to the local boards of health and with their cooperation it has been handled successfully. However, it still is with us; every now and then one or more cases develop in some out of the way place when you least expect it.

Don't believe that these sporadic cases are not the genuine article for, you will learn to your sorrow, that they are, later, when it may be too late to save your patient. The weather conditions, this winter, are in favor of diphtheria and the last cases in these parts (two weeks ago) were extremely severe, two patients dying out of four cases. The parents were more to blame than anyone else for failing to secure medical aid until the time had passed to save these children. At the beginning, the affection was so mild that it was considered only an ordinary sore throat by the family.

Some writers believe that, in some way, the disease connected itself with the "flu" as it made its appearance so closely upon the heels of that disease. I believe, if there is any connection between these diseases, it is, because the "flu" reduced the vitality and resisting forces of its victims greatly, thereby establishing a more suitable soil for the growth and multiplication of the diphtheria bacillus.

The object of this paper is, especially, to emphasize two points in the treatment of this disease. First, the importance of having cultures made as early as possible in every case in which the disease is suspected; second, the importance of administering antitoxin while awaiting the report from the laboratory.

I am aware that there still are a few physicians who do not believe in the curative power of antitoxin, asserting that it is a deadly poison. Others claim that, if any good results accrue from its use, they are due to the antiseptic or preservative it contains. These physicians continue to practice in the period of "befo' de wah". I do not believe that any physician should hurriedly accept new theories and adopt new methods of treatment until reasonable proof has been given of their value, but, the proof in favor of antitoxin in diphtheria is so overwhelming that I can not understand why there should be one doubting Thomas left.

The older members of the profession certainly remember the terror of those epidemics of diphtheria, during the '50, '60s and '70s, and even later; they will recall that the deathrate was appalling during these times. The advent of antitoxin has robbed this disease of much of its former terror. However, the deathrate still is too high and the only way in which it can be lowered is, to educate the public to their full responsibility with reference to this disease. The health boards should issue a concise circular of warning, in all suspicious throat cases, and insist that a physician be called early.

The physician should not be prejudiced against the use of antitoxin. There is no need to be afraid to use it; and it should be given early and in full doses. The physician who gives it timidly, in small doses,

late in the disease never will be successful in reducing the existing deathrate. While it is true that, now and then, a patient recovers from a moribund condition after a full dose of antitoxin, I never have seen this occur from a small, insignificant dose.

Let me impress upon my readers, to look with suspicion upon every case of sore throat with exudation. Take no chances by waiting for positive clinical signs or for a report of the bacteriologist before beginning treatment. If you are at all doubtful, administer a full dose of antitoxin. Should the findings prove that the case is not diphtheria you have done no harm; on the other hand, if the culture proves the presence of the Klebs-Loeffler bacillus, you have in all probability saved the life of your patient. The most advanced physicians of today will tell you that they have administered antitoxin time and again to children in whose swabbings the laboratory test did not show the characteristic bacilli; yet, they have never regretted it and would do the same thing again under the same circumstances.

It must be remembered that both the staphylococcus and the streptococcus produce membranes, on mucous surfaces, that are almost identical with that produced by the Klebs-Loeffler bacillus and the true nature of the disease can be determined only by cultural examination(?).

You will notice a question mark after the last sentence. My experience has proved to me that a child can have a mild diphtheria in nose or throat and repeated cultures may fail to reveal the Klebs-Loeffler bacillus, as the following clinical reports will show.

Mary C., five years old, was brought to my office complaining of nasal catarrh. The mother said that, a week before, the child had had a slight fever for two days, and that she did not eat very much; but, she believed that, now, the little girl was well except for the nasal discharge, while her breathing was bad during sleep. On examination, I found a persistent nasal discharge of mucus tinged with blood; nose and lips were excoriated from it. The child was rather anemic; temperature ½° subnormal, but no other constitutional symptoms. I did not suspect diphtheria at the time but, two days later, as the symptoms did not abate under appropriate treatment, and after removing some dried scabs, which was followed by bleeding, I had a culture made the findings of which, though, were negative. In all, three cultures were made during a week of treatment and all proved negative. Two days later, the mother said the child had been suffering from earache. I found the left ear discharging and had a culture made from this discharge (fourth culture) and which revealed true Klebs-Loeffler bacilli. Five thousand units of antitoxin were given, after which, both ear and nasal conditions cleared up in a few days.

In looking up the literature on this form of diphtheria, I find a number of cases (two reported by Dr. Charles G. Kerley) in which the laboratory reports were negative throughout, yet, after the best local treatment had failed, the patients were cured by one or more doses of antitoxin—which proves the causative bacillus. The bacillus of diphtheria may lodge in the nose, throat and larynx and exist on the mucosa for some time before producing the disease and, even after it has subsided. The germs may travel down into the bronchi producing diphtheritic bronchitis or bronchopneumonia (mixed infection); also into the stomach, producing pseudomembranous gastritis. It is not uncommon, in the nasal and mouth-and-throat form of the disease, to have the bacilli find their way into the middle ear producing otitis media.

Two years ago, a little patient of mine had the disease in a rather mild form. During her convalescence, she complained that one ear was closed up and that it cracked in the ear from time to time. One week after all manifestations of the disease had disappeared from the throat, she developed otitis media. Cultures were made from the pus of the discharging ear and were found to contain diphtheria bacilli. Two doses of antitoxin were administered, five days apart, with rapid recovery.

Before closing this paper, I want to say a few words on the dosage of antitoxin. My experience leads me to believe, and it is the opinion of clinicians who have treated hundreds of cases with antitoxin, that, as a rule, the initial dose is too small. If you are called to see a child and the examination reveals a membrane in nose, on uvula, tonsils, pillars of the fauces or pharynx do not hesitate to give 5000 units and, if the constitutional symptoms are unusual-

ly severe, give up to 10,000 units according to age. These doses should be repeated eight to twelve hours later if there is an extension of the membrane or if no change is manifest in its appearance or in the patient's condition. On the other hand, if there is a loosening or curling up of the membrane at its edges, or if it shows that granular appearance characteristic of the diphtheritic membrane, it is safe to wait twelve hours longer. In infants under two years, give 2000 to 3000 units as the initial dose. In severe cases of diphtheritic laryngitis increase this dose.

A patient ill with diphtheria is a poisoned patient and antitoxin is the antidote; to cure the case, one must give enough of the antidote to neutralize the poison. If you wait until late in the disease and then give it sparingly you will never accomplish this result.

C. W. Canan.

Orkney Springs, Va.

ALUM FOR PREVENTING MOSQUITO BITES

Your article on a mosquitofuge, appearing in the September (1919) issue of The Clinic, brought to my mind that I have been told that a strong solution of alum applied to the face and hands would prevent mosquito bites. I have never tried it, so, do not know anything about it from personal experience. However, someone may wish to try it.

James G. Hopkins.

Eads, Colo.

[It may be a "leetle" bit early for mosquitofuge recommendations. Yet, summer will be here soon, and then you want them. So, paste this in your straw-lid now.—Ed.]

REGARDING SNOW BLINDNESS

In the summary of an article on ocular conditions at Camp Lee, published in the April issue of Clinical Medicine, (p. 254) the statement occurs: "In snow blindness the cornea is partially destroyed by flying particles of snow or ice."

I make no claim to special knowledge on this subject, except from practical experience. However, so far as I have observed and experienced this condition, it appears to be due to reflected light from snow or, possibly, other light material.

While hunting in the Rocky Mountains, snow blindness occurred as a result of bright days, and not days when snow or ice was blowing. Colored glasses, or blackening the skin around the eyes with charcoal, will prevent snow blindness, while clear glasses that would protect the eyes against flying snow will not do so.

I never knew a case of snow blindness to occur in cloudy, stormy weather, even when the air was filled with fine snow, ice, sand and gravel driven by a fifty-mile gale.

The socalled snow blindness was characterized by impaired vision, intense photobia and conjunctivitis.

N. S. Mayo.

Chicago, Ill.

INCOMPATIBILITY OF ACETYLSALICYLIC ACID AND QUININE

Squibbs' "Materia Medica", page 2, says that acetylsalicylic acid shou'd not be dispensed with quinine or its salts lest poisonous quinotoxine be formed. I see, in recent journals, some reports of these drugs having been used in conjunction without reference to incompatibility. What about it, please?

S. S. Davis, M. D.

Hoboken, N. J.

[Dr. W. J. Robinson, in his book on "Prescription Incompatibilities" denies the possibility of trouble from this source. That is the only reference on this subject that we have been able to find, so far. If any readers of Clinical Medicine have observed untoward results from using acetylsalicylic acid in combination with quinine, we should like to have them to write to us.—Ed.]

Just Among Friends

A DEPARTMENT OF GOOD MEDICINE AND GOOD CHEER FOR THE WAYFARING DOCTOR

Conducted by GEORGE F. BUTLER, A. M., M. D.

The Art of Right Living

Common-Sense Comments on Health, Happiness and Longevity

Introduction

THE art of right living is, the scientific formulation of an earnest desire to know the truth and to do the best possible with it. The beginning of acquaintance with it may mean a new start in life, the turning over of a new leaf. This implies that the subject already has come to the age of discretion, has abandoned his old life, and begins anew.

The art of Life, moreover, consists in preserving the due proportion between the interest of the present moment and that of the future destiny, harmonizing the part with the whole. It demands the skill to adjust all functions to the organism and activities of mind and body in order to produce the results most advantageous on the whole. The individual must learn how to guide the stream of his life in such a manner as to embrace those opportunities he desires, and to attain whatever skill or knowledge he prefers. External and internal welfare must be carefully weighed and judiciously adapted.

Even the slightest acquaintance with the world reveals the multiplicity of kinds of lives that may be struggled after. To be wise in making selection of these possibilities, and to have the determination to retain hold on them, demands some skill and resource. It would be superfluous to enumerate the various kinds of lives and ideals that the numberless functions of the social organism give rise to. They are, after all, secondary to the conduct of the mind and body of the individual which, ultimately, determine health or ill health happiness or unhappiness, old age or early death.

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Princess Helene von Racowitza states the matter truly when she wrote in the "Autobiography": "Herein lies the great art of life—to enjoy to the full the scent of the roses and all other gifts of nature, whilst carefully avoiding the thorns; not to demand that people should be as we want them to be, but to love them as they are, and, realizing how monotonous life would be if we were all alike, rather rejoice that their various aspects brighten and illuminate our lives by a thousand new colors and different forms."

All great art is an imperfect, halting attempt to catch up upon life. For, life is the greatest art of all, and the master artist is the man who is living the beautiful life. But, whether we like it or no, we all are artists in the art of arts, and are producing either ugly or beautiful lives out of the materials at our command. We all are sitting at our separate benches, trying to produce out of the materials before us sound minds in healthy bodies. Many of us have poor material such as, unhealthy parents, imperfect health, faulty education, a most uninspiring home; so, our task is hard; still, this is to spur us to artistic achievement. None of the materials of true art are beautiful to start with, otherwise there would be no credit in the artist producing the grand result. Practical life often brings adversity, illness and all kinds of annoyances to us, but, it is our duty to regulate our sensibility and to voluntarily create an optimistic disposition, which will

enable us to take hold of everything, as it were, by the right end. In short we must *Learn How To Live.*

—

Altogether too much attention has been paid, of late, to the sheerly physical side of life, the care of the body. People have been taught what to eat and drink and wear, when and how to sleep, and bathe, and exercise all the functions of the body, *ad nauseam*, until one has been led to believe that bodily health is the be-all and end-all of human existence. Indeed, there has been no hesitation about proclaiming this very creed. "Safety first," and "the people's safety is the highest law," and similar maxims, all very excellent in their proper place and application, have been plastered over every portal of human activity, being extended even to the point of becoming a philosophy of life.

There need be no question, of course, about the desirability of good physical health. Certainly, as I have spent a large part of my life promoting and preserving and restoring bodily health, I am not likely to undervalue it. But, I am heterodox enough to believe that the living of a full, healthy life consists of something more than the possession of a sound gastrointestinal tract, the development of stout muscles, and to escape sickness. While subscribing heartily to the general truth of the formula "A sane mind in a healthy body," I am yet heretic enough to believe that the unfortunate inheritance of a defective body or the acquirement of an accidental disease is not necessarily fatal to full, rich living; that one may live nobly, usefully, happily, in spite of bodily handicaps—even, because of them. Nay, I carry my nonconformity so far as to suggest that the health and safety of the body are not always the highest considerations in the scheme of living, but that, on occasions, it may even be the highest wisdom (not to say, noblest courage) to deliberately court disease and death.

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Years ago, in the middle ages, and later, in what we are pleased to call the puritan times, it was the custom to regard the body with contempt, to look upon it as rather a hindrance to the higher life, as a thing to be subdued and disciplined and even scourged in order to dull its appetites and check its demands. Everything connected with it shared the same viewpoint. Sickness and infirmity were looked upon and treated with severity, as incarnations of an evil spirit.

There came a revulsion of all these sentiments, and the pendulum swung to the other extreme, from which it has not yet receded. Our bodies are regarded as sacred temples whose sacredness lies in them, themselves, rather than in any in-dwelling spirit, to be pampered and worshipped. Sickness and infirmity are chiefly accidents, calling altogether for compassion rather than for blame. The solicitude that concerns itself wholly with the material and bodily welfare and relationships of life is the "ultima thule" of brotherly love.

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I do not regret the change of view from the old medieval and puritanic sentiments. I have no desire to go back to their position. But, I do very seriously question whether we are not overdoing the opposite attitude. I do earnestly believe that the time has come for another readjustment of the value of things. Say that the human body is sacred; none the less, it is one of the "things that are seen, which are temporal," and it is both foolish and unscientific to regard it or treat it as if it were eternal. It is sacred only in so far as it is a symbol; and, Christ's relentless demand in regard to it still holds good: "If thy right hand offend thee, cut it off and cast it from thee; for, it is profitable for thee that one of thy members should perish, and not that the whole body should be cast into hell."

Whatever may be the faults of Christian Science, for this one thing it is entitled to credit and respectful consideration, namely, that it is calling us back to the recognition and worship of the unseen, to the supremacy of ideas over things, of spirit over matter. Stripped of all its externals and fallacies, its call is a call to the cultivation of the things that are not seen; to the exercise and development of heart and brain, even at the expense, if need be, of right hand or eyes; to the fostering of thoughts of goodness and beauty and kindness as identical with health; to the cultivation of spiritual love and friend-

ship as superior to and including the physical; to love the soul of your friend shining through his body.

It is to this larger, fuller life that I hope to minister in my work as a physician; to the upbuilding and the refreshing of the whole man and the whole woman. And, the ministry will be as broad as the need. "I am a man; nothing that concerns man is foreign to me."

Anything that helps men and women to the task of living the full, abundant, healthful, satisfying life, fruitful in blessing and happiness to themselves and others, will be my aim. I will make no attempt at foisting upon my patients any fads; far less at constructing and maintaining any rigid, four-square philosophy of life; neither shall I recite the symptoms of disease and suggest a line of treatment; I have no remedies to recommend in a work of this kind; no hobbies to ride; no axes to grind; no policies to carry out, except that of teaching men and women *How to Live*.

Life—whether one considers physical or mental or spiritual life, or life as a whole—naturally falls into three great divisions of functions: Work and Play and Rest. To do these three things well, and to get the greatest good out of each, is, to live well. Do these articles guide one to the road to health? Do they help some human soul more fruitfully to work, more happily to play, more blessedly to rest? Do they teach men and women *how to live?*

1. Health Insurance.

ALL prudent people insure their lives, but, how very few who believe in life insurance are governed by similar principles in the management of their health! A man who takes out a policy in a life-insurance company is subjected to certain conditions and requirements. Can he expect less in insuring his health? The first requisite is, to value health above all things—to seek health and keep after it. The second is, to learn the laws that govern life and health; and the third is, to obey these laws. Knowledge and obedience are the premiums exacted, or forfeiture of the insurance follows.

If you desire to insure good health, and you are in the habit of sitting up late at night, go to bed at a regular hour. This is an electric light civilization, and it is all wrong. If you have been in the habit of getting up late in the morning, try the novelty of rising early, and find out how easily the difficult problem of the night before is solved in the fresh, quiet hours. If you have eaten three heavy meals daily, cut off one of them, making breakfast and supper simple meals, and be surprised with good digestion, sounder and sweeter sleep, and a more amiable disposition. If you have worked night and day, and worried simultaneously, stop and consider whether the game is worth the candle. Ask yourself whether it will pay to spend your life and strength in gaining that which most easily takes to itself wings, while you are every day growing more and more nervous, irritable, and unhappy under an unnecessary burden. To insure your health, you must reduce life to the simplest terms. Show the spirit of obedience to physical and mental laws. Cultivate the love of right action. Eat, drink and dress simply. Live out of doors as much as possible, always resting and sleeping in the open air whenever it is feasible. When you are inclined to worry, turn to brighter thoughts and endeavor to throw off care. Don't take your troubles to bed with you—but, as someone advised, hang them on the chair with your trousers, or drop them in a glass of water with your teeth.

Keep up your physical strength. The strongest physically are less liable to nervous breakdown. To eat moderately at regular hours, to sleep sufficiently, to bathe daily, to get enough active exercise in the open air—if possible, in a form that will add interest to the mere exertion—these should be the commandments of the physical law.

Don't give way to your emotions. Meet worries with common sense. Be decisive; self-poised, self-controlled. Make philosophy your friend, and this will lead you into that serenity that is the chief factor in health insurance.

Follow these little guide-posts on the footpath to peace and health, and you will learn that, to live, will be a delight; to breathe, a pleasure; to think, a luxury; to sleep, a rest; and, when at last your career is ended, you will—

"Like ripe fruit drop
Into our Mother's lap, or be with ease

Gathered, not harshly plucked."
—*Learn How to Live.*

—

**Nature's price for health is, regularity. You cannot safely bottle up sleep tonight for tomorrow night's use, or force your stomach at one meal because you expect to eat sparingly at the next or become exhausted in working day and night, expecting to make it up later.*

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Worry, anxiety, jealousy, malice, hatred, hot temper, selfishness, dishonesty, perversion of moral integrity; in short, every discordant or abnormal thought, emotion or expression, tends to destroy that perfect equilibrium of the faculties and functions which is called health.

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No one thing contributes more to health or success than a strong, vigorous will. It is a perpetual health tonic, physically and mentally. It braces the system, enabling it to endure hardships, disappointments and disease.

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Bodily vigor means, activity, enthusiasm, determination, and energy—it means that the mind has at command its best powers, and that all the parts of your nature are in a condition to work together joyously and harmoniously.

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The care and preservation of health is a moral duty and must be ranked among the cardinal virtues—that is, among the virtues which are the most important and essential to your well-being.

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Bad habits, careless living, dissipation, over-excitement, over-work, sooner or later bring on exhaustion—physical, mental, moral.

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The requirements of health are, good air, good food, suitable clothing, cleanliness, and exercise and rest.

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Do not expect to have health for nothing. Nothing worth anything can be obtained without effort.

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Health, strength and longevity, depend on immutable laws. There is no chance about them.

*Many of the paragraphs following these essays I have gathered from various sources during years of reading. It is impossible to name the authors, so I shall omit quotation marks. I hope they will be as helpful to you as they have been to me.

2. Work

"EMPLOYMENT is nature's physician." Health is maintained by occupation. When one quits work, he loses the pep that comes to him from doing something and being of some use, of responding to demands and maintaining a routine; and, his muscles get soft, his internal organs go on a strike, his appetite fails, he loses sleep. Work is necessary to growth because, through it, one acquires strength of mind and body. Both, brain and muscle, grow strong by exercise, by assuming responsibilities, by bearing burdens and doing things. Work of some sort is as necessary to health as eating and drinking.

Idleness and inaction breed nervous prostration, fear, worry, gossip, crime, constipation and a host of other evils. We make friends through work, we find in it beauty, humor, pathos—all that goes to make up a full and normal life. Congenial work is as necessary for peace of mind as it is for the health of the body; it is the symbol and avenue for almost all that is worth while in human life. The happiest hours of your life should be, when you are working, and, you can learn to like any work you may be doing. But, whatever your job is, you should dignify and vitalize it by putting your ideal into it, giving your life, your energy, your enthusiasm, all to the highest work of which you are capable. Your heart must inspire what your hands execute. Your work, sometimes, may be hard and thankless, but, like tough metal, it serves to suit the needs of a strong man and is better suited to that purpose than sipping soft drinks at a summer resort.

Cut out your "grouch" if you have one. Quit feeling sorry for yourself and feel sorry for others. When you pity yourself, because you think you have a hard job, your soul shrivels up, but, when you pity others, your soul expands and grows. When you are troubled with grouchiness and self-pity, just remember that you are in a universal guild of toil, that the universal forces are infinitely adaptable to the poor jobs as well as to the good ones, and

that someone must do the work, then, why not you? Any labor will be irksome if done in a discontented unhappy spirit.

"Who sweeps a room as in His sight
Makes that and the action fine."

To work, and to honor one's task by associating it with the whole; to cut out envy, jealousy and complaint, and replace them with nobler traits would prevent much sickness and go a long way toward solving the labor problem.

Anyone can be healthy, happy and successful who holds the right mental attitude and who works with enthusiasm, determination and a light heart. When you work, cultivate calmness, poise, sweetness, doing your best, bearing all things bravely, living your life undisturbed by the prosperity of your boss, or the malice and envy of the man out of a job.

Health and happiness are free if you but reach for them—occupation and the right state of mind are pretty sure to fetch them. The more useful work you do, and the more you think and feel, the more you really live. Then, after your work is over for the day, give yourself an hour or so for self-examination, for thought, for body and brain rest, for amusement; and you will have a good conscience, a good appetite, and peaceful slumber.

Learn How To Live

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Though no man can add a cubit to his stature, we all can make ourselves ill, and most of us can keep ourselves well. Most people will keep fairly well if they eat little; avoid alcohol and tobacco; take plenty of fresh air and exercise; keep the mind at work and the conscience at rest.

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The courage given us by our work is like the self-reliance which Emerson has made forever glorious. Like self-reliance, courage is ultimately a reliance on widening concentric circles of property which reach to God.

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Nervous strength, power of concentration, of application to a task, of control of emotion, of decision, of inhibition and perseverance, in spite of distraction and fatigue, come only by exercise and practice—in short, by work.

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If anyone wants a happy old age, he must first of all never betray his optimism, second, never brood over the past and the dead; third, work away to the last breath to keep as much of his cerebral elasticity as possible.

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The more useful work you do, and the more you think and feel, the more you really live. The idle man is a useless man, and, no matter to what extent his life may be prolonged, merely vegetates.

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Service is one of the ways by which we can get a purchase on the whole universe. If we find the job where we can be of use, we are hitched to the star of the world, and move with it.

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It is wonderful how much work a man can get through who works with system and method, who has acquired the invaluable habit of putting odd moments to a good account.

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Work keeps the human being in contact with stimuli from without that are necessary to his health.

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Employment is a "perennial, fire-proof joy," and one of the best remedies for the maladies of men.

Among the Books

POTTENGER: "VISCERAL DISEASE"

Symptoms of Visceral Disease. A Study of the Vegetative Nervous System in Its Relationship to Clinical Medicine. By Francis Marion Pottenger, A. M., M. D., F. A. C. P. With eighty-six text illustrations and nine color plates. St. Louis: The C. V. Mosby Company. 1919. Price $4.00.

In the words of the author, "the present monograph is a study of visceral disease, not from the standpoint of the disease process, important as that is, but from the no less important standpoint of the patient who has the disease. It is an attempt to show how pathological changes in one organ affect other organs and the organism as a whole through the medium of the visceral nerves."

Our knowledge concerning the visceral nerves, the "sympathetic" nerves, and so forth, really is of very recent date, going back virtually only some twenty years, since the late Byron Robinson published his pioneer work on the abdominal brain. Important and remarkable as were Doctor Robinson's investigations and results, it is not until quite recent years that physiological, pathological and clinical investigations were based upon it more devotedly and that the problems arising from these studies received adequate attention. Indeed, even now, Doctor Pottenger's monograph stands almost alone, there being but few others existing dealing with this highly important subject.

It is strange that clinicians generally have ignored the importance of the vegetative system and have failed to see its intimated relationship to clinical medicine; for, in the words of the author, it is the key that unlocks the door to many of the secrets of visceral activity. An understanding of the vegetative nervous system and the activities of the endocrine glands will explain to the clinician most of the physical acts connected with visceral function and furnish the bridge between the pathologic changes in tissues and the expression of the disease in altered organic function. In other words, the vegetative nerves and the products of the endocrine glands are the mediums through which visceral symptoms are expressed.

Doctor Pottenger acclaims, justly, that phase of clinical medicine upon which we are just entering and in which "the patient who has the disease is to receive a consideration equal to the disease which has the patient." We have for many years, insisted upon this necessary distinction. We always have maintained that it is the patient that requires treatment and not the disease; that the sick person individually needs restoration to health, no matter what name may be tacked on to the collection of symptoms that he relates or that we can discover.

The book is in three parts, the first, discussing the relationship between the vegetative nervous system and the symptoms of visceral disease. The second part deals with the innervation of important viscera, with a clinical study of the more common viscerogenic reflexes. The third part is devoted more particularly to the vegetative nervous system.

The Reviewer had hoped to review the book formally, in detail. However, the more he studied it and the more deeply he became interested in it—the more difficult became the task of writing an actual review. The subject, dealt with in a masterly manner, is so vast, so difficult (because different from our accustomed studies), so multifarious in its many aspects, that the Reviewer can but urge physicians to procure the volume and to devote to it many hours of study. One thing is certain, that physician, especially, that general practitioner who studies this book carefully and persistently, will, in consequence, become by far a better physician; he will be enabled to aid his patients, es-

pecially those in whom the pathological conditions are obscure, to much better advantage.

In studying Doctor Pottenger's book, the introductory chapters should by no means be overlooked, or neglected; for, they present a discussion of present-day tendencies in clinical medicine, also of the requirements of clinical medicine and of medical practice, that has never been equaled in the knowledge of the Reviewer. The introductory chapter alone will be found well worth while and will make the reader glad to have invested in the book.

"MEDICAL CLINICS OF NORTH AMERICA"

In a New York number of *Medical Clinics*, we justly expect a lot of good things; nor will our search be disappointed. Of the thirteen contributions, from the foremost New York clinicians, in the September (1919) issue of this useful publication, the Reviewer was attracted especially to that by Dr. A. S. Blumgarten, on vagotonia and sympathicotonia as aids in the diagnosis and treatment of endocrine conditions. This article presents an excellent and instructive résumé of the present-day teachings regarding endocrine conditions in the organism and their perversions.

The Medical Clinics of North America is published bi-monthly by the W. B. Saunders Company, Philadelphia, at a subscription price of $10.00 per year. Each number is devoted to the clinical teachings of one great medical center in the country, other issues having been, Boston numbers, Chicago numbers, Philadelphia numbers, and so on. The publication is well worth while, the teachings incorporating the results of the latest investigations and discoveries; while the "clinical" style of teaching, or writing, serves to fix the lesson more firmly in mind.

TOWNS: "HABITS THAT HANDICAP"

Habits That Handicap. The Remedy for Narcotic, Alcohol, Tobacco and other Drug Addictions. By Charles B. Towns. New York: Funk and Wagnals Company. 1920. Price $1.50 net.

This book comes to us well sponsored, the preface having been written by Dr. Richard C. Cabot, and the introduction by Dr. Edwin L. Bowers, while a valedictory in the form of an appendix, is contributed by Dr. Alexander Lambert.

The title is aptly chosen, sufficiently so to attract; for, habits may be either the most beneficial or the most damnably deteriorating masters. If Victor Hugo call habit the nursery of errors, and Goethe characterizes it as the most imperious of all masters, many writers attribute to it a strength greater than that of nature, and Cowper complains that habits are soon assumed; but, when we strive to strip them off, it's like being flayed alive.

The habits that the writer of this little volume discusses, truly are not only grim and merciless masters, but, also, demoralizing and deteriorating and perverting influences in the lives of their victims. The name of the author, Mr. Charles B. Towns, indicates, of course, that he deals more particularly with drug habits, and he pays his disrespects impartially to opium and its derivatives, to cocaine, the various hypnotics and headache mixtures, allegedly non-injurious, to King Alcohol and to Lady Nicotine. While he has not presented a medical treatise, in so far as a medical treatise consists in the discussion of etiology, symptomatology, diagnosis, treatment of a certain disease condition, or conditions, the reading of this book, nevertheless, will be a useful pursuit for the doctor, no matter how busy or tired he may be; he will forget pressing business and will cease to be aware of his fatigue in his absorption in this brightly and cleverly written arraignment of those habits that so seriously interfere with the sound and wholesome growth of our young people, that make vicious many who were previously good and render the criminals more criminal.

While the text comprises almost exclusively a discussion of the serious aspects of drug addiction—of whatever kind, this constitutes a kind of information that the physician is in duty bound to acquire. No doubt about it, the drug evil is one of our most serious problems. It is terrifying in its distribution, it is awful in the degree in which it afflicts even schoolchildren and young people, it is heart-breaking in its ultimate and, finally, destructive effects upon its victims.

There is one "practical" point upon which insistence is laid strongly and forcefully

and which the physician will do well to heed and remember. That is, the insistence upon the necessity of elimination, or detoxication, of the intoxicated organism whose every function and entire cell life has been perverted by the multifarious action of the drug addiction.

Incidentally, it may be said that, as a matter of course, Mr. Towns does not have much use for the Federal Narcotic Law, commonly known as the Harrison Act. He is positively convinced that this by no means solves the problem and that it is broken constantly and persistently—also, with relative ease.

"Habits That Handicap" is a book worth while reading; indeed, it should be read repeatedly. The many epigrams in which its writer indulges serve to drive home the lesson that he attempts to instil into his readers.

"WHAT BECOMES OF SALICYLATES IN THE BODY?"

What Becomes of Salicylates in the Body, Including a Brief Survey of the Manufacture and Therapeutic Uses of Salicylic Acid, its Compounds and Derivatives. Published by The Heyden Chemical Works, Garfield, New Jersey.

Salicylic-acid derivatives belong to the most-widely used remedies in the armamentarium of almost all physicians. Much interest, very naturally, attaches to the fate of these remedies after they have been introduced into the body.

This question is discussed in the little booklet referred to here which, though published by a firm of manufacturing chemists, can not be classed strictly with advertising literature, since it deals with products that are absolutely nonproprietry, many of them being U. S. P. chemicals.

The pamphlet gives much interesting information regarding the salicylates and is well worth writing for. We understand that the publishers will send copies to physicians on request.

CRUCHET AND MOULINIER: "AVIATORS' SICKNESS"

Le Mal des Aviateurs, ses causes et ses remèdes. Par les Drs. R. Cruchet, professeur agrégé à la Faculté de médecine de Bordeaux, et R. Moulinier, médecin de la Marine. Paris, 1920. J. B. Baillière et Fils. Price, 3 frs. (nominally, 60 cents).

As long ago as 1911, the authors of this little booklet published their observations on what they designated as "Aviators' Sickness." During subsequent years, the disturbances falling under that designation were studied in all civilized countries and were made the subject of more or less numerous publications.

With the intensive utilization of aviation, during the war, the study of physiological disturbances in flyers acquired a high degree of interest and importance, and, even since the war, this has by no means lessened for the reason that aviation not only is a "sport" for some daredevil youngsters who can afford it, but, it promises to become a recognized and legitimate method of rapid transportation.

For this reason, physicians in general naturally are interested in the effects that flying at low and high altitudes exerts upon the normal organism.

Aviators' sickness is discussed in its various phases in the little book before us which, therefore, will prove of decided value to those physicians who are interested in this subject and who have a reading knowledge of the French language.

MAUBLANC AND RATIÉ: "MEDICAL EXAMINATION OF AVIATORS"

Guide Pratique pour l'Examen Médical des Aviateurs, des candidats à l'Aviation, et des pilotes. Par le Dr. Maublanc et le Dr. Ratié. Avec figures dans le texte. Préface de M. le Dr. André Broca. Paris: 1920. J. B. Baillière et Fils.

Here is another little volume dealing with the medical aspects of those who desire to qualify for flying. The authors acquired a considerable experience in this work during the war and the result of their observations is of interest.

GLEY: "INTERNAL SECRETIONS"

Quatre leçons sur les sécrétions internes. Par E. Gley, professeur au Collège de France, membre de l'Académie de Médecine, Paris: 1920. J. B. Baillière et Fils. Price 6 frs. (nominally, $1.20).

This little book contains a report of certain lectures delivered by Professor Gley to the biological society of Barcelona.

Spain, in December, 1917. Their publication was delayed through causes connected with the war; nevertheless, it is fortunate that the delay was not permanent, as Professor Gley's careful work in the study of internal secretions is well known. The little volume before us deals with the problem largely in its physiologic phases, the clinical aspects being left for special treatment. However, for the student, the book is of decided value.

In the first lesson, the author reviews historically and critically, the ideas dealing with the internal secretions. In the second lecture, the meaning of endocrine gland and endocrine secretion is discussed in detail, while the third lecture is devoted to a critical study of internal-secretion investigations. The fourth lecture reviews the results that have been produced, so far, in this field of physiologic and biologic investigations.

BRUBAKER: "PHYSIOLOGY"

A Text Book on Physiology, Including a section on physiologic apparatus. By Albert P. Brubaker, A. M., M. R., LL. D. Sixth edition, revised and enlarged; with 356 illustrations. Philadelphia: P. Blakiston's Son & Company. 1919. Price $4.25.

Medicine, which deals with disturbed physiological processes must necessarily take into consideration the results of investigations in socalled normal physiology. For, after all, pathology, that is, the study of disease-processes, is but physiology gone wrong. For this reason, textbooks on physiology should not be forgotten and relegated to the top shelf in the physician's library as soon as he starts in practice. On the contrary, they should continue to be studied diligently, and care should be taken to purchase new and revised textbooks on the subject every few years, in order that the knowledge of, and familiarity with, physiological processes may be kept to date. It must not be forgotten that the last few years of physiological research have resulted in much valuable and important information; information that threw light upon many disease-processes that had been incomprehensible before or had been badly understood.

Of the various textbooks on physiology that are available, the one by Brubaker has recently been subjected to the most frequent and diligent revisions. It is, therefore, useful to the practitioner—the more so as it is not excessively detailed or abstruse but is relatively easy reading. Brubaker's "Physiology" may be recommended confidently for the study of physicians who desire to keep up with the times.

BARLETT: "AFTER TREATMENT"

After Treatment of Surgical Patients By Willard Bartlett, A. M., M. D., F. A. C. S., and Collaborators. In two volumes. St. Louis: The C. V. Mosby Company. 1920. Price $10.00.

Surgical after-treatment is considered as beginning when the last suture is tied and the patient is ready to be removed from the operating room to his bed, and it should last until the patient is restored to health. This, manifestly, extends the period of after-treatment beyond the time at which the patient is discharged from the hospital; indeed, the author has elaborated a follow-up system that contemplates a correspondence with every patient for at least one year following the operation. This period of time is none too long, in our opinion, for, many times, it takes at least one year after a serious operative procedure for the organism to adjust itself to modified conditions under which it has to function.

While this work naturally is of more immediate interest to the surgeon, the general practitioner also will do well to devote careful study to the after-treatment of surgical patients. By the way, the Reviewer likes the title in which the after-treatment of surgical *patients* is stressed instead of the after-treatment of surgical *cases*.

The work presented by Doctor Bartlett is a very exhaustive one. In the first volume, more general discussions are presented, while the second deals with the after treatment of patients following definite operations. We find chapters devoted to some important topics as the immediate effects of anesthesia and operation, the manifestations of pain, thirst, nausea and vomiting, dreams, mental aberrations, complications arising from local anesthesia. Altogether, the immediate and remote symptoms that may be referred to the anesthesia, both subjective and objective, have received detailed discussion.

Other chapters treat of sleeplessness, hiccoughs, headaches, backache, shock, hemorrhage, postoperative ileus, bedsores, drug addiction in surgical cases, postoperative psychoses, and many other troubles.

It is not so many years since the postoperative care of surgical patients has first received separate monographic attention. The subject is a highly important one and the present work easily ranks with the best ones that we have on it.

U. S. GENERAL HOSPITAL NO. 28

From nearby Fort Sheridan, we received, a while since, a modest publication that, however, is replete with interesting information.[1]

This interesting volume gives a graphic account of what is being done for the sick, wounded and disabled soldiers at the reconstruction hospital at Fort Sheridan. It has been written for the purpose of stimulating an active interest in the excellent work that the government is doing in bringing these wounded men back to health and strength and in training them for some vocation.

Many of the wounded men suffer from a lethargy, or lack of interest in what goes on around them. It is necessary to stimulate their attention. The earnest attempt is made to find out what particular thing the patient takes an interest in and what he would like to do. After this stage is passed, the patient is ready to take up bookkeeping, telegraphy or some other occupation. He is now ready for the education service.

After the bedside treatment, the curative workshop comes into play. The work shop occupation is selected with a view to its curative value in each particular case, the surgeon indicating, to the aide in charge of the workshop, what joints are to be exercised and the character of the movement sought to be secured.

The patients are taught to make many useful articles, such as, handkerchief boxes, glove boxes, book-ends, waste-paper baskets, foot-stools, card trays and piano benches. In brass or copper, they turn out matchboxes, ashtrays, calling-card trays, bowls and many other useful and artistic objects.

Supplementing the technic of the surgeon, the materia medica of the physician, and the appliances of the orthopedist, there comes physiotherapy, massage and electrotherapy. There is scarcely a condition that does not ameliorate under massage, securing stimulation of the circulation and absorption in long immobilized parts, overcoming a shortening of the fibroelastic elements of tendon, muscle sheath or ligament, or softening and freeing adherent scars from periosteum and subcuticular tissues.

Beside the reconstruction department, there is an academic department that gives bedside instruction. The objects covered are: Reading, writing, arithmetic, civil-service requirements, public speaking, advertising, English, French and Spanish. This extension course, begun at the bedside, is continued, later, in the class-rooms, where the patient completes his academic training, and leaves the hospital as physically and mentally fit as he can be made.

There is a commercial department, teaching the subjects commonly found in an up to-date business college or the high schools of today. There are 21 subjects of technical instruction comprising among others: woodwork, shoe repairing, tailoring, electric wiring, telegraphy, motion picture operating, drafting and printing.

Other subjects represented are: agriculture, commercial art, photography, automobile mechanics and music. In reality, the modern reconstruction hospital is essentially a university in the broad sense of the word.

The wounded men at Fort Sheridan Hospital publish a paper of their own called *The Recall*. Those who wish to assist in the publication of this magazine and learn what is going on in Fort Sheridan, from week to week, are asked to send $1.50 for a six-months' subscription to *The Recall*, Fort Sheridan, Illinois.

It is the purpose of *The Recall* to promote morale among the men still in the hospital and to furnish the men with first-hand information of all activities in and about the hospital, and provide them with a weekly "news letter" which they can send to their friends and relatives.

[1] U. S. A. General Hospital No. 28, Fort Sheridan, Illinois. By Edward O. Harrs, 1st Lieut., Signal Corps, U. S. Army, and Sydney B. Flower, Sgt 1st Cl., Med. Dept., U. S. A.

Condensed Queries Answered

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report their results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

Answers to Queries

Answer to Query 6479.—"Urticaria. If I would have to wait nine days for a cure, I should leave the practice of medicine and go to breaking rock. Give calomel, gr. 1-3, podophyllin, gr. 1-3, and bilein, gr. 1-4, every two hours for three doses; then, a saline every two hours till free action of the bowels is secured. Apply pure cider vinegar to the eruption to allay itching and your patient, ninety-nine times out of a hundred, will be relieved of his trouble."

W. S. Cline

Woodstock, Virginia

Queries

Query 6489.—Cigarette Smoking and Anemia." C. L. S., New York, writes: "In the November issue, you say, in answer to a question about anemia, that 'anemia often is caused by cigarette smoking.' While not a cigarette smoker, myself, nor an admirer of cigarette smoking, I am not clear as to how it does cause anemia; and I know others who are as ignorant on that point as I am. Would you kindly enlighten us? Your journal is such a reliable source of information that I, with many others, depend on it for information on most questions."

After very careful consideration of the point you raise, we are compelled, for the time, at least, to take a neutral stand.

You must bear in mind that it was Dr. Henry Borst, of Pensacola, Fla., and not the editors of the journal, who stated that cigarette smoking causes anemia.

As a matter of fact, however, a more or less pronounced anemia exists in the majority of young cigarette smokers and, the more excessive the indulgence, the more pronounced, in most cases, the anemia. We must admit also that, among the symptoms of chronic nicotine poisoning, we find anemia of more or less severity and, unquestionably, the constant smoking of cigarettes interferes with nutrition, especially in the adolescent, produces enervation, deranges circulation, irritates the mucosa of the nasal pharynx, and thus paves the way for bacterial invasion—another potent agent in the production of anemia.

The question raised is an interesting one and might be debated pro and contra at considerable length. At the present moment, however, while we are inclined to believe that anemia may be produced by cigarette smoking, we would hesitate to advance the dictum that this condition invariably results from such practice.

We suggest that you write Doctor Borst personally and ask him to present such evidence as he may have in concrete form.

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Query 6490.—"Incontinence of Urine." H. P. S., Tennessee, wishes to know "the best preparation for incontinence in a man about forty-eight years old, who has been under treatment of other physicians for three years."

As you can readily understand, before we can intelligently discuss the treatment of this condition, we must have an idea of the cause thereof. As you are aware, incontinence of urine in the *aged* is generally due to atony of the sphincter vesicæ.

Small doses of hyoscyamine and strychnine valerianate, alternated in particularly stubborn cases, together with cantharidin, usually prove effective. Strychnine valerianate, gr. 1-64, hyoscyamine, gr. 1-250, may be given before dinner, supper and at bedtime, with cantharidin, gr. 1-5000, every hour for three doses before retiring. Arbutin, gr. 1-6 to 1-3, three times a day, also may be tried. Be very sure, though, that there is no prostatic disorder.

Arbutin is regarded, by some, as virtually a "specific" in senile incontinence. Personally, while we consider this drug a most useful remedial agent, still, in many cases marked by atony of the vesical sphincter, the addition of strychnine and hyoscyamine is almost essential.

Delphinine is another drug that has been highly lauded by many competent observers. Delphinine acts upon the central nervous system. It should rarely be used during the persistence of an acute inflammatory condition.

Some observers report that the drug checks mucous, or mucopurulent discharges; and exerts, in a somewhat less degree, a tonic influence upon the vesical mucosa and the kidneys. In full doses, it produces vomiting, giddiness, and convulsions. In reasonably full doses, it may act as a laxative; but, more often, it promotes diuresis and occasions feelings of heat and tingling in various parts of the body.

The Eclectics regard staphisagria as a remedy for chronic inflammation and atony of the renal and reproductive organs. Scudder, for instance, considers staphisagria a specific for irritation of the genito urinary apparatus, especially in chronic irritation of the neck of the bladder associated with temporary enlargement or irritation of the prostate. Locke says that it gives marked relief in urinary incontinence of old men with vesical and prostatic irritation, frequent teasing or urgent desire to urinate. In our own hands, however, cupurpurin and arbutin, with small doses of berberine, have given better results in such conditions.

The usual dose of delphinine is, 1-128 grain every thirty to sixty minutes for a few doses, to effect; then, every one to three hours as may be required to maintain the impression. Bear in mind that individual susceptibility varies greatly. Patients receiving delphinine should be ordered bland or mucilaginous beverages; barley water, for instance.

If you will give us a clearer idea of the conditions which obtain in this particular case, Doctor, sending, at the same time, if possible, a 4-ounce specimen of urine (taken from the mixed 24-hour output, stating total quantity voided) we shall be pleased to aid you to the best of our ability.

QUERY 6491.—"Duodenal Ulcer?" J. W. T., Pennsylvania, is treating a man, forty two years old, cigarmaker by trade, who had influenza a year ago, followed by pneumonia and general nervous breakdown; being unable to work at his trade till last August. He had occasional "weak spells" when he was not able to do anything. About a month ago, while at supper, he had a fainting spell. Since then, he is not able to work, and experiences occasional weak spells. His appetite is good, he has been constipated for years but keeps his bowels regular. The tongue is lightly coated, temperature normal; blood pressure, 115; urine is acid; specific gravity, 1020; no albumin, no sugar, a trace of indican. There is a constant pain from umbilicus to epigastrium. A deep-seated pain a little to the left of umbilicus, becoming worse when lying, especially on the left side. The patient also complains of pain on top of head, which appears to be synchronous with the abdominal distress. Our correspondent asks: "Can you tell me what is the matter with this man and what can be done for him; for, I am making very little headway."

It is extremely difficult for us to make diagnostic or therapeutic suggestions in this case without a much clearer idea of underlying conditions.

You state that your patient had influenza a year ago, followed by pneumonia and a general nervous breakdown, and, now, suffers from "pain a little to the left of the umbilicus and on top of the head."

The blood pressure seems to be reasonably satisfactory and the urine, the acidity of which is 1020, contains no albumin or sugar, and only a trace of indican.

You do not give us any idea of the patient's appearance, weight, character of stool, or pulmonary conditions. The fact

that the patient has been constipated for years must be borne in mind; also, the individual's occupation, that of cigarmaker.

Is there any evidence of arteriosclerosis? Disturbance of vision? Are the reflexes normal? Has there been any marked loss of weight?

On general principles, we would be inclined to have this man receive a barium testmeal and secure radiographic plates of stomach and intestines. It is just possible that you have an ulcer to deal with. On the other hand, this may be an instance of the so-called neurasthenia gastrica—a term the writer dislikes to use, but one which, to a certain extent, covers a multitude of vague distresses in the abdomen, and that are distinctly due to disturbance of the nervous system or derangement of the internal secretions—dyshormony.

In this connection, Doctor, read the writer's article on "Climacteric Disorder in the Male" which appeared in the October issue of CLINICAL MEDICINE.

If you feel disposed, study your patient more carefully and write us further.

In the meantime, prohibit the use of tobacco, coffee, and tea, and give this man mineral oil night and morning, together with some such bitter tonic and digestant as: papain, gr. 1; pepsin, gr. 1; berberine hydrochloride, gr. 1-32; extract gentian, gr. 1, before meals. Morning and night, give one-half the contents of an ampule of B.-bulgaricus bouillon. Initiate treatment with two or three full doses of blue mass and soda, and follow the next morning with sodium phosphate. The latter salt may be given with advantage once or twice a week for a while.

QUERY 6492.—"Collinsonia and Emetine?" A. H. R., Missouri, inquires if, in our judgment, it would be practicable to combine the principal alkaloid of collinsonia with emetine hydrochloride in ampule form for hypodermic use.

No alkaloid has even been discovered in collinsonia. Lochman's analysis revealed resin, starch, tannin, wax in all parts of the plant, mucilage in the root, and volatile oil in the leaves. The exact therapeutic constituent, or constituents, of the drug have never been determined.

There is, however, no question of the value of collinsonia, and the concentration produces all the results that can be secured from any preparation of the plant.

Collinsonia is regarded as possessing alterative, tonic, stimulating and diuretic properties, and, unquestionably, it exerts a definite action upon the venous system and the mucous tissues, it also has a marked action on the vagus, relieving irritation in parts to which that nerve is distributed.

In some forms of laryngitis, it may be regarded almost as a specific, and, in clergyman's sore throat and aphonia, resulting from vascular hyperemia, it produces prompt results.

In catarrhal disorders of the gastrointestinal tract, collinsonia is unquestionably useful, while it, also, relieves the distressing symptoms of subacute proctitis and the sense of heat and weight in the rectum, due to engorgement. It is one of the most useful remedies in the treatment of internal hemorrhoids.

Collinsonoid could not be satisfactorily combined with emetine hydrochloride, but it is possible that Lloyd's fluid preparation of the drug could be combined with emetine. However, we believe that, on further consideration of the subject, you will find such a combination therapeutically undesirable.

QUERY 6493.—"Salivation from Leptandra?" L. Q. S., Washington, recently prescribed leptandrin, gr. 1-6, four times a day, for some liver derangement. Within two days he observed marked salivation with expectoration of very tenacious mucus. He wishes to know if such action is characteristic of the drug.

We are at a loss to understand how 1-6 grain of leptandrin administered four times a day for two days, could cause marked salivation with expectoration of tenacious mucus.

Leptandrin is one of this writer's favorite drugs and, in the past ten or fifteen years, he has given thousands of doses of leptandra. While, unquestionably, it does stimulate the glandular system and exerts a direct influence upon atonic mucosa it rarely, if ever, acts as a sialagog.

There is a vast difference between the action of leptandrin and of the fresh root, the latter being actively and sometimes dangerously cathartic in full doses.

Leptandrin and other preparations of the dried root may be regarded as possessing

cholagog, laxative and, in full doses, cathartic properties. The ordinary dose, such as was administered in your case, does not produce copious alvine discharges, but gently stimulates hepatic function and favors normal intestinal excretion, also improving digestion.

King states that no better laxative could be used in atonic conditions than leptandra and, no matter how great the intestinal atony, it will be found to operate gently and without systemic disturbance.

In indigestion with deficient secretion and constipation, the drug may be combined with podophyllin; and, when the stools are clay-colored, it may be given to bring about bilious discharges, even though diarrhea be already present.

The specific indications for leptandra may be said to be, tenderness and pain in the hepatic region, with coated tongue, yellow skin, drowsiness, dizziness, mental depression, cold extremities, bitter taste in the mouth, or nausea, dull frontal headache, restlessness with insomnia, diarrhea with passage of half-digested food, clay-colored evacuations, retarded portal circulation, gloomy and depressed mental state.

In this case, we would continue the use of leptandrin, reducing the dose, slightly, perhaps, and administering, each day, a full dose of sodium phosphate.

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QUERY 6494.—"Erythema Multiforme? Congenital Deafness." S. W. A., Canada, writes: "Will you help me by diagnosing two cases—the dermatosis especially puzzles me.

"1. Girl, aged eleven. The eruption began two or three months ago; is red in color, slightly darker than blood, and raised slightly above the skin surface. In size, the lesions vary from that of a pinhead to as large as that of a small bean; they are perfectly flat on top, smooth but crossed by lines. The individual spots get larger. The eruption itches at times, but there are no scratch marks. Outbreaks were found on the side of the knee, on the lower part of the back and on the back of the neck. There are no constitutional troubles.

"2. Boy, two years and three months old, absolutely undisturbed by noise, even a gun; but a rap on the wall or a tap on the floor will attract his attention. He is well developed and indicates good intelligence Why does the vibration attract him? Is there any chance of his hearing being affected? There has been no sickness in the two years."

In view of the limited clinical data presented in the first case, we are unable to venture a diagnosis.

You state that this eleven-year-old girl presents, on the knee, the lower part of her back and the back of her neck, a red or slightly violaceous eruption, the lesions being elevated, varying in size from a pinhead to as large as a small bean; flat on top and smooth, but crossed by lines. You also state that there is some itching, but no scratch marks. There is no evidence whatever of constitutional trouble.

This eruption, we understand, has persisted for two or three months, but we are not informed as to whether the first crop disappeared and has been succeeded by others; nor do you state whether there is any desquamation or discoloration of the skin as the original lesion fades.

It is possible that you have here an erythema multiforme, which is an inflammatory disease, characterized by the appearance of reddish or purplish-red macules or papules, which occasionally become vesicular. The eruption usually makes its appearance suddenly and, after the first few days, the lesions are likely to increase somewhat in size while new efflorescences appear. At first, the efflorescences are of a somewhat light pink or red, and, later, they become violaceous. Rarely, however does this disease persist for weeks.

The most common type of the eruption is the papular (erythema papulatum), and the most frequent site of the disease, the surface of the forearms and legs, though not infrequently other parts of the body are affected. The disease is common to both sexes, though most often observed in females during early adult life or adolescence. It occurs most frequently in the spring or autumn and is apt to recur for one or two years. Intestinal toxins are an important factor in most cases. The more severe types of the disease are thought to be of an infectious character, though no definite microorganism has as yet been found.

In lichen planus, especially the mild forms, we have pinhead to small-pea-sized, flat, glistening, crimson or violaceous pap-

ules, sometimes with a slight central depression and irregular base. There is a tendency to coalescence and the subsequent formation of areas of roughened or even scaly surface. The favorite sites of the disease are, the forearms and lower part of the leg.

Lichen rubra is, however, a comparatively rare disease and is most frequently observed in those of the neurotic class.

This writer is of the opinion that, in order to arrive at a satisfactory diagnosis, it will be necessary for you to study the case more carefully and present as clear a clinical picture as is possible. It might be an excellent idea, at the same time, to send a few scrapings from the affected area to our pathologist for examination.

Deaf-mutism, in cases where idiocy can be excluded, may be due, when congenital, to ostitis or periostitis of the temporal bone, encroaching upon the cavity of the middle ear, ankylosis of the ossicles, absence of the internal ear or any of its parts, or to colloid degeneration of the labyrinth. It may result from atrophy of the auditory nerve, or be due to a lesion of the brain.

We are at a loss to understand how a rap on the wall (we believe the word in your letter to be "wall" though it may be "skull") could be appreciated by the patient, though we can quite understand that a rap on the skull—or, even, a knock on the floor—might affect him through cranial conduction.

It would seem that the sooner this little fellow is taken to a thoroughly competent aurist, the better his chance of learning to speak, for, even though he may utter sounds, a complete abeyance of the auditory sense, especially if it has been present since birth, is apt to result in mutism.

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Query 6495.—"Significance of Urates and Phosphates in Cystitis." W. B. G., Indiana, sending a sample of urine for analysis (case of chronic cystitis), writes: "Please give me your opinion upon the urinary analysis. What are the ingredients of the urine that are detrimental to recovery? What bearing have the sodium-acid-urate crystals in this case and what is the cause of their production? Also explain the production of the triple and amorphous phosphates."

There still is marked evidence of the existence of a cystitis, though, at the present time, only colon bacilli are present, the staphylococci and streptococci having disappeared. The reaction of this urine is alkaline, pus is present in moderate quantities, together with squamous epithelium a trace of mucin, very many large-sized triple and much of amorphous phosphates also, a few red blood corpuscles.

There is little question that this urine was alkaline when voided. As you are aware, the ammoniacal decomposition of the urine, which is so frequently observed especially in chronic cystitis, is a product of microorganisms, and this transformation of urea into ammonium carbonate takes place without the aid of a ferment developed by them. However, a cystitis may exist, especially when the bacillus coli is the invading agent, and the urine remains acid. Indeed, recent researches have shown that the reaction of the urine, in cystitis is relatively often acid and that the importation of bacteria into the bladder may produce cystitis, even without the transformation of urea into ammonium carbonate being a necessary accompaniment.

It is unnecessary to discuss here the question of how the microorganisms, which produce cystitis, reach the urinary bladder, but, it is important to remember that, once infection of the vesical mucosa, with concomitant inflammatory thickening, has occurred, there is prone to be more or less retention of the urine, with decomposition thereof. Under such circumstances, the reaction of the urine is, in most cases, strongly alkaline and it contains some albumin, mucus and pus.

The presence of acid-sodium-urates in a specimen does not mean anything in particular, itself, as virtually all the uric acid in the urine is present in the form of urates, that is, the uric-acid salts of sodium, potassium, ammonium, calcium and magnesium. Two varieties of urates are found—acid and neutral. The acid salts are less soluble and more readily precipitated.

Bear in mind that two varieties of phosphaturia can be distinguished, namely, the true and the false; the true phosphaturia depending upon an absolute in

crease in the amount of phosphates eliminated in the urine, as determined by quantitative analysis. A mere deposit of phosphates in the urine, immediately upon voiding or on standing, without a relative increase in the total amount of phosphates (that is, 3½ to 4 grains), constitutes a false phosphaturia.

Deposits of phosphates in the urine may occur within the body in cases of inflammation or suppuration of the urinary organs, especially when there is a decomposition of the urine within the track, and, of course, such cases cannot be called true phosphaturia.

The phosphorus eliminated with the urine is derived from two sources: from the food and from decomposition of the tissues, especially the phosphorus containing proteids, as well as nuclein and lecithin. In the urine, such phosphorus appears as (1) earthy phosphates (calcium and magnesium), and (2) alkaline phosphates (the phosphates of sodium and potassium). The alkaline phosphates are more abundant, the proportion being about 2 to 1.

The earthy phosphates are held in solution in the urine by the diacid sodium phosphate, to which the normal acidity of the urine is due, and, whenever this acidity is neutralized, either before or after voiding these earthy phosphates are precipitated; though, as you are aware, they can readily be dissolved by making the urine acid again.

QUERY 6496.—"Pruritus of Autotoxemic Origin." C. V. W., South Dakota, asks if we can suggest any treatment for a married woman, twenty-four years old, who has intense itching, especially at night, sometimes scratching until bleeding occurs. Her father was troubled the same way for years and she has been affected for about eight years. The skin is, apparently, normal, no rash or any other signs of trouble being in evidence. The legs are affected more than any other part of body. As the woman bathed once a day, only two baths a week were allowed, but, no beneficial results followed such limitation.

We are inclined to believe that the itching in this case is due to autotoxemia of intestinal origin.

Of course, occasionally such a pruritus is a sensory neurosis, there being nerve disturbance without associated appreciable structural change, and the provocative irritation may be either of reflex origin or direct, and may have its seat in any part of the nervous system, from center to periphery. The tissues remain unchanged throughout the entire course of the malady, except for secondary conditions that may be brought about by persistent scratching and rubbing.

We strongly suggest that you send a specimen of this patient's urine (4 ounces taken from the mixed twenty-four-hour output, stating total quantity voided) to a competent pathologist for examination.

Diet your patient carefully and ascertain whether itching is more annoying after she has partaken of certain articles of food, such as, pork, veal, corn, potatoes, tomatoes, and others. Try bathing the entire body, before retiring, with a solution of Epsom salt. For three nights, give the patient blue mass and soda, gr. 1-2, and bilein, gr. 1-12, half-hourly for 3 doses; the next morning, a full dose of sodium phosphate, (effervescent), then give: sodium sulphocarbolate, grs. 2 1-2; sodium sulphate, grs. 5; sodium bicarbonate, grs. 20; colchicine, gr. 1-500; juglandin, gr. 1-6; xanthoxylin, gr. 1-6; sodium chloride and aromatics, q. s., a level teaspoonful dry on the tongue, swallowed with four to six ounces of water an hour before meals, continuing such procedure for two or three weeks.

It might be well, of course, to simply institute the Epsom-salt sponge bath and diet until we have the report on urine.

When sending the specimen, Doctor, please give us a more definite idea of the physical conditions. Is the woman stout or thin? Dark or fair? Nervous or phlegmatic of temperament? Are her teeth in good condition and is there any evidence whatever of pelvic congestion?

Summary of Results

HIPPOCRATES recommended yeast for Leucorrhœa and the monks used it for the "plague."

In the middle of the nineteenth century, physicians used yeast successfully for furunculosis, anthrax and diabetes.

Later yeast was shown to be effective in diseases of the skin, suppurative processes, diseases of the respiratory passage, gastro-intestinal diseases, vaginites, general infectious diseases.

In 1917 came the first test of Bakers' yeast under modern conditions of close observation by competent investigators.

Using Fleischmann's Compressed Yeast, Doctors Philip B. Hawk, Frank Crozer Knowles, Martin E. Rehfuss, Philadelphia, and James A. Clark, New York, observed its action upon ninety-one different cases with the following result:

Condition	Number of Cases	Improved or Cured
Furunculosis	17	16
Acne Vulgaris	17	17
Acne rosacea	8	8
Constipation	10	9
Gastro-intestinal catarrh	3	3
Intestinal intoxication	1	1
Eczemas	5	0
Arthritis deformans	1	1
Psoriasis	1	1
Erythema and urticaria	1	1
Bronchitis	2	2
Urethritis	2	2
Pruritus	1	1
Folliculitis	1	1
Conjunctivitis	1	1
Duodenal ulcer	1	1
Swollen glands	1	1
Totals	56	66

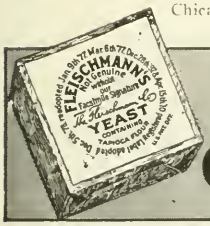
The Fleischmann's Compressed Yeast used is the same as sold by grocers in the familiar tin foil packages. Its freshness and uniform strength permits precision in dosage which is usually one cake t i d, in suspension in water, milk or orange juice.

If not convenient to secure from grocers, physicians may write The Fleischmann Company in the nearest large city and Fleischmann's Compressed Yeast will be mailed direct on days wanted.

A complete report of the above investigations will be mailed to physicians upon request.

The Fleischmann Company, New York

Chicago, Ill. San Francisco, Calif. Seattle, Wash.



Fleischmann's Compressed Yeast

News Notes Department

They say that everyone should have a hobby of one sort or other, to divert the mind betimes from the regular channel and to diversify in a measure the mental processes. For an office man the best hobby is one that will take him out of doors, into the open and the fresh air. Such a hobby will be good for him, resting him, conserving his vital forces, broadening his vision which too long and consistently, it is true, is restricted by four walls

And what shall it be? The A. J. Root Company, Medina, Ohio, are proposing that it shall be honey-culture or bee-keeping. They insist that this hobby is particularly diverting as well as profitable. Doctors in small towns with plenty of garden space for hives, will be especially interested in the booklet sent out by the company, on the subject.

Of the numerous antiseptics devised it is likely that hydrogen peroxide will be among the last to survive disuse, the last to become obsolete. Certainly it is among the best known, with a host of friends who swear by it. There are good reasons for its popularity. Nascent oxygen, as chemistry informs us, has considerable germicidal power. The peroxide in solution carries it in available form. It is quite safe to apply too, along with its efficiency, which consideration encourages its use for daily and routine purposes and leads to its being entrusted to patients for use between professional visits. The fact that it engages and combats sepsis with visible aggressiveness, plain to anyone, is also in its favor: in consequence the patient is strongly impressed by it.

Its one great fault is that solutions lose strength rapidly, in the end even becoming inert. In some cases they are probably below standard to begin with; in others the deterioration is due to a defective package. It is necessary, then, to choose a reliable make from among the many offered. That known as Di oxygen is said to be full strength, without irritating preservatives.

With some basis for their fears, there are doctors in the field who hesitate and even refuse to use salvarsan intravenously. Nothing can induce them to do so, although conceding that the drug works quite magically at times And others there are who use it with the ut

Examination of Pathological Tissue $5.00

Accurate histological descriptions and diagnoses of tissues removed at operation should be part of the clinical record of all patients.

Autogenous Vaccines $5.00

We culture all specimens aerobically and aenaerobically and isolate the offending organisms. Pipettes for collecting material for autogenous vaccines sent upon request.

Wassermann Test, Blood or Spinal Fluid . . $5.00

We do the classical test. Any of the various modifications will be made upon request without additional charge.

All other routine laboratory work done at reasonable prices.

Sterile containers with complete instructions for collecting all specimens sent gratis on request.

NATIONAL PATHOLOGICAL LABORATORIES

Chicago	New York	Brooklyn	St. Louis	Detroit
5 S. Wabash Ave.	18 E. 41st Street	Chamber of Commerce	University Club Bldg.	Peter Smith Bldg.

Efficient Sleep Must Forever Precede Efficient Wakefulness

Since proper sleep is no doubt the greatest contributor to proper wakefulness and mental alertness, physicians and hygienists are giving more and more attention to the subject of sleep in its relation to health and public welfare.

It is being recognized that the quality of sleep is as important a factor in individual efficiency as is the regularity or the duration of sleep.

Obviously, sleep that is postponed or disturbed by discomforts arising from mattress deficiencies cannot be wholly recuperative or health-maintaining.

In the Sealy Mattress every requirement of hygienic design, sanitary construction and physiologically correct service has been met. Only antiseptically cleaned long fibre cotton is used and the special air-weave process makes it a complete unit without tufting. This mattress invites deep, restful sleep because of its resiliency, and because of the unbroken, smooth, surface which molds itself to support every part of the body. It is the ideal mattress for the physician's personal use.

SEALY MATTRESS CO.

Sugar Land, Texas

most caution, selecting their cases so carefully that scarcely more than half become eligible for the treatment.

All such will no doubt be glad to learn that salvarsan is now supplied in suppository form for rectal administration. They are put out by the Anglo-French Drug Co., 1270 Broadway, New York City, under the name of Supsalvs. As marketed for use, each suppository is enclosed in a metal capsule as a caution against contamination and deterioration. Very good results are being obtained in the treatment of syphilis by this method, according to report. Those interested are invited to write the makers for prices and clinical data.

In this and many back issues appears the little classified advertisement of the Consolidated Printing and Publishing Company, Chicago, promising the doctor letterheads, envelopes, statements and other stationary needs at prices that are reasonable. They have been in this business for years; they know thoroughly as old experienced printers all its ins and outs; and they know what the doctor wants, many of their orders in the course of the year coming from medicos in all section of the country.

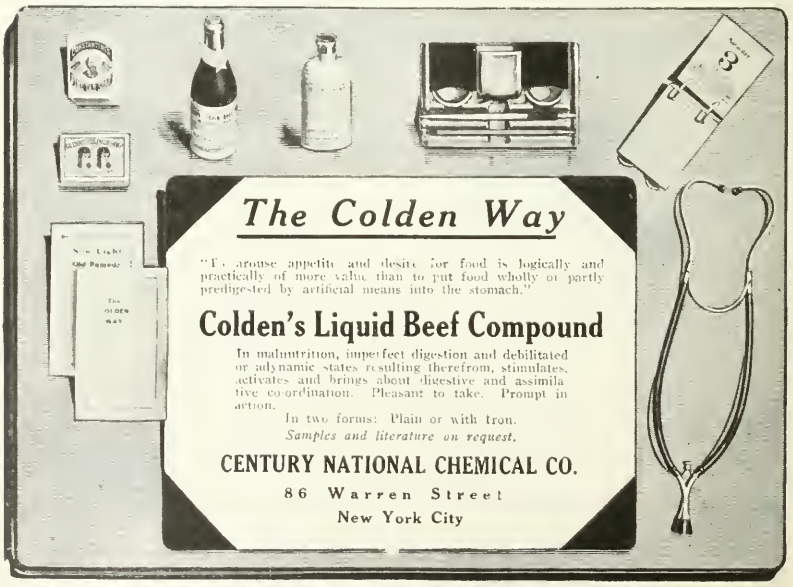
In cities and towns of size, good printing is available readily enough. But in the smaller towns this is not so. Printing of a kind may be had, of course, but more than likely it is not the kind the doctor should have although too often he fails to use as much discrimination in the choice of his stationary as he ought. And that is bad. As he selects his drugs, with care and astuteness, so ought he to select his letterheads and statement forms. Much depends on appearances; on display of good or bad taste in everyday matters. And anyhow, when the best and the worst are often retailed at the same price, why not have the best?

The company says that samples of their work may be had on request. They print labels also.

It is easy enough on paper to devise a diet for a patient and deliver to him emphatic instructions in the matter. But there are always fixed habits and long-acquired tastes to contend with, and when gastric functioning is subnormal, the stomach being upset on slight provocation, the best of intentions are apt to come to nothing. Forced feeding is advised in tuberculosis; emaciation indicates a want of food that is assimilable by the organism; neurasthenia expresses a need for food that supplies phosphorus and nitrogenous material.

The need in each case is plain to see. But how to supply it; that is the question.

One form of nutriment especially serviceable when digestion is impaired, from an irritable or diseased condition of the gastro-intestinal tract, is Bovinine. It is essentially beef blood, with serum, hemoglobin and organic salts intact, a


The Colden Way
"To arouse appetite and desire for food is logically and practically of more value than to put food wholly or partly predigested by artificial means into the stomach."
Colden's Liquid Beef Compound
In malnutrition, imperfect digestion and debilitated or adynamic states resulting therefrom, stimulates, activates and brings about digestive and assimilative co-ordination. Pleasant to take. Prompt in action.
In two forms: Plain or with iron.
Samples and literature on request.
CENTURY NATIONAL CHEMICAL CO.
86 Warren Street
New York City

Wholesome Food
For All the Year—

Grape-Nuts

A blend of wheat and malted barley, baked for twenty hours to develop richness of flavor and fullest nourishment; easily digestible and ready to serve direct from the package.

Grape-Nuts is a great food, and finds its place in many a doctor's family where its sturdy qualities as a body builder are understood and appreciated.

All Grocers Sell Grape-Nuts

Samples of **Grape-Nuts, Instant Postum** and **Post Toasties** for personal and clinical examination, will be sent on request to any physician who has not received them.

POSTUM CEREAL COMPANY, Inc.
Battle Creek, Michigan

most concentrated food obviously. No doubt food values are sacrificed by cooking; heat so changes certain principles as to render them indigestible. Hence the argument in favor of the raw food dietary. Overcooking spoils a good steak; makes it hard to digest and less nutritious. Bovinine is absolved from this objection. Its makers claim it contains all the elements of red meat, unimpaired.

In the course of such infections as influenza, for example, or overwork, or excesses of any sort which deplete the natural store of vital forces, the nervous system suffers more or less profoundly, as its myelin is consumed or abstracted faster than the oxidation process replenishes it. It thus becomes necessary to supply phosphorus and such other needed elements as compose the nerve-stuff of the organism, the myelin of nerve sheaths and the brain cortex, and somehow to stimulate the lagging oxidation process to keep with the requirements

Much of course is possible in neurasthenic conditions with a readjusted diet, in which the albuminoid victuals are increased proportionately. And likewise we find rest very beneficial in the treatment. But it is difficult to enjoin patients to rest and dieting; especially in the matter of eating is habit and taste so fixed and decided that change is far from popular. It is therefore wise to administer phosphorus medicinally in such a form as Sanatogen, say. This is a combination of the glycerophosphates with casein; the Bauer Chemical Company claims great virtue for it and invites doctors to test it clinically.

A few months hence hay fever will begin making countless people miserable, and the doctor importuned for relief from the extremely troublesome symptoms which the malady imposes. The prospect is scarcely more pleasing to him than to his patient, as a rule, for experience with most of the orthodox remedies gives small hope of success. Now and then he has had results, but more often his efforts have counted for little; his reputation as a benefactor to ailing humankind waning with failure and the patient going on through the season quite as woeful as in previous years.

What now? Is there anything new, promising better results? The Arlington Chemical Company, Yonkers, New York, are recommending their Arlco-Pollen Extracts. Under the circumstances it seems they are worthy of investigation. And now, in advance of the unwelcome visitor on his annual round, is the time to investigate and prepare for actualities.

First offered to dentists and used by them in tooth extraction and other operations, Dr. Waite's Local Anesthetic has invaded the medical field and many doctors now employ it in minor surgery with success. It is a combination of iodine, benzo-boric acid and several essential oils in glycerin, with 1 per cent of cocaine. The former ingredients seem to complement the cocaine effect, with the result that its obtunding value is materially increased. The immediate advantage is that the cocaine danger is considerably diminished. In other words, less cocaine is needed

"One need not follow the 'isms' of the Faddist to be up-to-date."

Medicine has its fads. But experience, after all, has the last word. Experience points to the fact that mercury and iodids cannot be dispensed with in the treament of Lues.

"Mixed treatment" in syphilis is coming back into almost routine use, in connection with the use of arsenic compounds.

PIL MIXED TREATMENT
(Chicester)

supplies the need for a dependable form of Hg. and I. BECAUSE,

Uniformity of composition and purity of content assure maximum effect. The combined action of mercury and iodine is secured in one agent, making for economy and ease of administration. Accurate adjustment of dosage to each individual case is facilitated, without buccal, gastric or intestinal disturbance.

Samples and literature will be promptly sent to physicians on request.

Pil Mixed Treatment (Chicester) is put up in bottles only. Price $1.00.

Hillside Chemical Company
Newburgh, New York

Announcement

The old house of Stearns & White Co., established since 1887, is now under new management and we wish to assure the medical profession that we are exerting every effort to serve them to their complete satisfaction.

Thousands of physicians from coast to coast have been using the Stearns & White products for years and are perfectly familiar with our formulas, but for those that are not so well acquainted, we will gladly send samples and literature upon request.

The quality of our products is of the highest type and you will find our service prompt. We are now equipped to give excellent service in the production of private formulas and earnestly solicit your patronage.

SCOPARINA, FEL BOVINA, BENZOMOL, ALTEROIDS, as well as our other leading Specialties, are continuing to win the confidence of the practitioners as shown by the increasing demand for these products. If you are not already familiar with our Specialties, let us submit samples that you may judge their merits.

Besides our Specialties we monufacture a full line of Tinctures, Elixirs, Syrups, Ointments and Tablets.

STEARNS & WHITE CO.

ESTABLISHED SINCE 1887

CHICAGO, ILL.

to obtund the tissues than is required when an ordinary solution is used.

The preparation is marketed both in ampules each holding a quantity for a single operation, as well as in bulk ounce bottles. As put out it is sterile and isotonic with the blood. The Antidolar Mfg. Company, who make it, say that it requires no boiling, although it can be boiled with impunity if deemed necessary.

Cases of spinal deformity, or muscular weakness without perceptible deformity, are not uncommon. The causes are various; one is infantile paralysis. After the malady there is usually a spinal curvature following, with contracture of tendons and shrinking of muscles. In others the trouble is inherited.

Whatever the cause, some sort of support is needed for the dorsal body. It should be light as possible, while yet strong enough to hold firmly. It should be adjusted to fit the conditions, which in detail vary greatly; and this is most important. It should fit snugly, without rubbing or chafing the surface.

It is well to know that appliances of the right kind may be had from the Philo Burt Mfg. Company, of Jamestown, N. Y. They can overcome almost any difficulty, and are so confident of their ability to furnish what is needed that they offer to make a spinal appliance to order for any case and allow a 30-day trial. In that time it will be known whether it is proper or not; if not the company will gladly make such alterations as are necessary.

A number of remedies which formerly were given orally are today being administered by many practitioners intravenously. With them the direct route has superseded the indirect. They believe better results are to be had by throwing the medicament directly into the circulation. An impression is made more quickly on the organism by this method. Results are more certain, they reason from the fact that the medicament goes unchanged and full strength to its goal, whereas when given orally it is liable to chemical change or deflection while in the alimentary canal. There are other reasons, too, why this method is favored, despite the pain of puncture on the side of the patient and the technical difficulties on the side of the physician.

The Geo. A. Breon & Co., of Kansas City, are specializing in medicaments for intravenous use. One of their numbers is Arseno-Mer-Sodide. The name suggests its nature. It is said to give good results in syphilis. As packaged, it comes in ampules, ready for injection without mixing or dilution.

In easy circumstances, their work done for them or made extremely light, many women of today do not get the quantum of exercise their bodies require. They lead sedentary lives as a rule; exert themselves but little; even refusing to walk. The motor cars carry them to their various destinations, or the tram cars, or the steam cars. At any rate they are conveyed. They need not walk and with necessity gone they get no exercise in this way.

"Natura Non Saltet"

Nature does not jump at conclusions, but judges by results.

Acriflavine GH **Proflavine GH**

have been clinically tested and their value practically proven in the treatment of suppurating wounds, to prevent septic infection and for acute or chronic gonorrhoea.

Their antiseptic potency is increased in presence of blood serum. Solutions 1:1000 do not inhibit development of gonococci, do not precipitate albumin, are highly diffusible. **Acriflavine GH** and **Proflavine GH** can be applied locally, injected intramuscularly or intravenously. **Acriflavine** and **Proflavine** have been accepted by the Council on Pharmacy and Chemistry of the A. M. A. for inclusion in New and Non-Official Remedies.

Literature and Price Lists on demand

HEYL LABORATORIES, INC., 437 BARRETTO STREET, NEW YORK

Dioxogen

H_2O_2 12%

A Peroxide of Hydrogen

that is

1. Superior to U. S. Phar. standards for purity and strength.
2. Notably free from irritating or toxic action.
3. Odorless, practically tasteless, neutral in reaction and contains no acetanilid.
4. Powerfully antiseptic, detergent and healing.
5. Invaluable in the home, the office, the factory and wherever a dependable non-toxic germicide is needed.

The Oakland Chemical Co

59 Fourth Avenue New York City

Antiseptic
Germicidal
Cleansing
Deodorant
Prophylactic

Stable
Non-Toxic
Non-Irritating
Odorless
Non-Staining

Hence physical culture, such as conceived by Susanna Cocroft, Chicago. Women need it. They want it. They are willing to pay for it. Prescribe walking for them and ten times out of twelve nothing would come of it. Walking is so common, so banal. And then, too, city streets are usually devoid of interest. And here is a point. Susanna Cocroft contrives exercises that are interesting. And she says she gets results with them. They make women fit, trim and graceful; give poise where poise is wanting; develope neglected muscles; reduce the weight in those tending to obesity. She invites inquiry from doctors, with the view to cooperating with them in suitable cases.

Complete bowel evacuations, says Burrows, are the secret of health. He holds that the ileocecal gut segments will not propel their contents onward when the terminal colon and rectum retain residuals such as are present in chronic constipation and catarrhal conditions of the colon. Chronic constipation is the lot of many. Often the condition is developed during infancy and childhood as the result of improper feeding and the too free use of cathartic drugs. In later life the costive habit so formed is hard to overcome, at times impossible; not a few are foredoomed to constipation all their days. Nor does the mode of living to which they are forced, comprehending the sedentary occupation and a diet composed too largely of milled foods, help them in any way.

Such people at regular intervals need a purge, for which such a saline as Sal Hepatica is best, serving well the purpose as it does with the least likelihood of adding to the evil already present.

The quick complete action of a saline is also desirable for eliminating offending materials from the bowel tract when obviously they are at bottom of a toxemia or colitis or other disturbance. The sooner the person is rid of them the better. We are confronted here by an emergency, in which a good saline is advisable.

Ours is certainly a changing world. Once on a time, scarcely more than a hundred years ago, gum opium, the size of a pea, was a common prescription. Now we find opium and opiates as a class frowned upon generally. The consideration now is safety no less than results. And so, with this new sentiment abounding, the Combs Chemical Company should have no difficulty in interesting the doctor. They offer Hyos-Sco-Piper for his use in place of morphine as an anodyne. The latter, as is well known, leads frequently to mishap and addiction. Its tendency to make addicts of patients, while it is being given for the relief of pain and distress, is its worst part and alone warrants a substitute not open to this objection.

Hyos-Sco-Piper is said to serve very well, being effective without intruding this habit-forming tendency. The promise is certainly a good one; its fulfillment surely worth the seeking on the part of the conscientious practitioner, who has the welfare of his patient at heart. Many recommend it as a sedative in nervous case; in addicts it serves nicely while the

DOCTOR

The Persistent Puzzling Pain of the

Curable Chronic Case

is removed by the use of

The Roemer Perfect Light and Roemer Tension Table

better than by any other means

Write for Particulars to the

Physicians Supply Co.

Kirk Bldg. Waukegan, Ill.

You need them for your own pain

Free Booklet on Request

Patent Pending.

The Pepsodent Page
PAT. OFF.
REG. U.S.

Acid in Reaction

Pepsodent is an acid dentifrice, to accord with the modern requirements.

It contains no soap, no other alkali.

Thus it instantly increases the flow of saliva, and increases its alkaline index.

Litmus paper tests show the mouth alkaline after a Pepsodent brushing.

* * * * *

The acid ingredients do not affect the teeth.

Tricalcic phosphate is largely present in Pepsodent. It is the polishing agent.

The teeth are essentially tricalcic phosphate by 95 per cent.

The acid reaction on tricalcic phosphate has gone to completion in the paste. There can be no further effect on this chief tooth constituent.

* * * * *

Natural teeth in our laboratories have been kept immersed for nearly four years in Pepsodent mixed with saliva.

The Pepsodent acids have not affected them in the least.

Reasons for Acid

Dr. H. P. Pickerill, in his well-known book on The Prevention of Dental Caries, demonstrates the need for an acid dentifrice. And his verdict is now generally accepted.

An alkaline dentifrice instantly represses the salivary flow and reduces its alkaline index.

An acid dentifrice increases the salivary flow, and increases its alkalinity.

So the desired effect is best accomplished with an acid dentifrice.

* * * * *

Dr. Pickerill says: "We are therefore driven to the inevitable conclusion that alkaline dentifrices and mouth-washes for the prevention of dental caries must be abandoned."

This means that tooth pastes containing soap come in the abandoned class.

* * * * *

Write us, if you have not done so, for all facts about Pepsodent, and for a tube to test. Cut out this reminder so you won't forget.

Pepsodent
PAT. OFF
REG U S

The Scientific Dentifrice

Based on Activated Pepsin the Digestant of Albumin

THE PEPSODENT COMPANY, 367
5619 Ludington Bldg., Chicago, Ill.

Please send me, free of charge, one regular 50c size tube of Pepsodent, also literature and formula.

Name .....

Address .....

Enclose card or letterhead

drug is being gradually withdrawn, and a cure accomplished by the tapering off method.

The discovery that milk might be evaporated and canned was a utilitarian gain to mankind, for which we may well be glad. It means a great deal to us in this day of great cities and overcrowding, when the blessings of the country are denied to the majority. It supplies our need when fresh milk is hardly to be had; especially in southern and tropical clinics is it needed and appreciated. It is always available, as and when wanted, for the requirements of the family. It keeps indefinitely in the cans, in the most trying climates. It is cleaner than fresh milk as ordinarily had. So, all things considered, the man who first contrived to evaporate milk, whoever he was, did much for mankind. He was a real benefactor.

Many brands are now in the market. One of the best is Borden's. The doctor may safely recommend it to his families, and prescribe it as a supplemental food for infants during the period of weaning, and when the mother's milk is deficient. Samples and instructions for using it in this way may be had by writing the canners, 108 Hudson St., New York

The pain of minor operations can be completely relieved by the use of a local anesthetic, and Procaine (Abbott) is the best of all local anesthetics. Every doctor should have a supply of 1-3 grain hypodermic Procaine tablets with Adrenalin. Include several tubes in your next order.

The members of the medical profession have from time immemorial been accused of two characteristics which are diametrically opposed to each other; and it is not infrequent that they are charged, often, almost in the same breath with being constantly hankering for new things—like the Athenians, according to the version of St. Paul—and with being ultra-conservative if not actually reactionary. Strangely enough, both charges are true. Physicians are forever seeking for new things, providing that these enable them to treat diseases more efficiently than do the old methods. At the same time medical men are greatly averse to breaking with old friends and old trusted remedies that have stood in good stead for many years, and have often made it possible for them to guide their patients through dangerous times and to hasten their complete recovery and restoration to health. The latter purpose has been attained for many years by many physicians in many cases by one preparation in particular which is "proprietary," it is true, but nevertheless has proved its reliability and dependability times without number. We refer to Fellows' Syrup of the Hypophosphites, a preparation that originated in England and is known the world over. This preparation possesses great possibilities for good.

How a Famous Laxative Was Perfected

THE problem of removing the disagreeable taste of Cascara Sagrada first demanded attention for it was so bitter that the average palate rebelled against its use. A long series of scientific experiments resulted in this pleasant tasting and most effective tonic laxative—Kasagra. For more than twenty years Kasagra—Cascara Aromatic—has been prescribed as a palatable and effective tonic laxative.

Use the Original

The term "Kasagra" was coined and adopted to protect the medical profession, druggists and ourselves against preparations bearing the name "Cascara Aromatic," a title original with us. You can make sure of obtaining the original and genuine full strength Cascara Aromatic by specifying "Stearns' Kasagra" on your prescriptions.

Write for Physicians' Samples

Frederick Stearns & Company
Manufacturing Pharmacists
Detroit, Michigan
In Business Over Sixty Years

X-RAY INVESTMENT INSURANCE

BEFORE you invest in stocks or bonds, you use every means at your command to ascertain the soundness of the issue, the financial responsibility and the personnel of the organization soliciting your confidence.

A reliable x-ray equipment represents another kind of investment, but its your money that's involved just the same.

The keystone of the Victor Electric Corporation is: Responsibility to every purchaser of Victor apparatus. Each time the prospective buyer "looks us up" before buying, we realize an advantage—so does he.

Thirty years of conscientious effort to lead rather than follow, is only one of the reasons for the predominance of Victor apparatus amongst the discriminating.

Buy Victor—a "safety first" on your investment.

VICTOR ELECTRIC CORPORATION

Manufacturers of Roentgen and Physical Therapeutic Apparatus

Cambridge, Mass. 60 Broadway — CHICAGO Jackson Blvd. and Robey — New York 131 E. 23d St.

Sales Offices and Service Stations in all principal cities

Still another food product appealing generally to physicians is Lister's Diabetic Flour, advertised this month in our pages. The merit of a starch free diet in diabetes is too well known to require elucidation in this space. It simply remains for the prescriber to advise for his patient the best flour product available for the preparation of the bread, muffins, biscuits and other articles that are served on his table.

This flour is self rising, and for this reason it is very convenient. It is packed in individual boxes, holding one day's supply. The millers will be glad to send recipes and a price list to anyone requesting them.

"I am getting splendid results from Chlorazene Surgical Cream in cases of eczema."
Sturgis, Mich. W. E. Watkins, M. D.

The last few years have shown progress in many different lines of medical activity, not the least among these is the circumstance that we are now in a position to moderate materially, and even to relieve entirely the distressing symptoms from which women suffer not only during menstruation but during the climacteric period. Time was not so long ago, when all a physician could do was to say that this was the fate of all women and that they had to have patience under the infliction. Not a very cheerful consolation, it must be admitted.

However, since organotherapeutic products have come to be understood better and since their modus operandi has been investigated more closely, it has become possible to supply some of those substances the lack of which gave rise to the distressing phenomenon of the menopause, and this has enabled physicians to benefit their patients.

Among the many acceptable organotherapeutic products on the market, the present writer confesses a particular preference for Hormotone, as it is prepared by G. W. Carnrick Co., 21 Sullivan St., New York. Either with or without post pituitary substance, according to the needs of the individual patient, it has a tendency to overcome symptoms due to insufficient hormone action and, many times, has enabled the writer to restore patients to health more promptly than he could without this splendid preparation. It is worth a careful clinical trial and the manufacturers are ready to supply physicians with complete information.

Elsewhere in this department, we have commented on the obvious value of heat in the treatment of local inflammatory conditions. The Sterling Relieving Lamp Company, 456 Garfield Ave., Chicago, are among those who offer an appliance for applying heat and their announcement may be interesting to some of our readers. They issue a very neat, descriptive catalog which they will be glad to send upon request to anyone desiring it.

Their lamp is of such size and simplicity as regards construction that it can be used in any home equipped with electricity for lighting purposes as well as in the office. It is portable in a carrying case of black composition leather. Sev-

Two Points

of necessity in a doctor's office—

A Paper of Pins

and a box of

Tyree's Antiseptic Powder

One Holds and the other Heals.

The holding power of the pins you know about. The healing power of the powder is greater because it never slips out. This useful little utility will be ***mailed free*** to doctors upon request.

TYREE'S
PULV. ANTISEPTIC
COMP.
(ANTISEPTIKOS)
FROM ONE TO FOUR TEASPOON FULLS TO BE ADDED TO A PINT OF TEPID WATER AND USED FREELY TWO OR THREE TIMES A DAY
J. S. TYREE
CHEMIST
WASHINGTON, D. C.

J. S. TYREE, CHEMIST, Inc.

Washington, D. C.

The Case For Coffee

Number Three

Half-truths have, from Galen's time or before, handicapped the progress of scientific medicine. The assumed prejudicial effects of coffee are ascribed to its caffein content. Caffein as employed as a *drug* in therapeutics is really *thein* obtained, not from coffee at all, but from old tea leaves. Caffein and thein are said to be *chemically* identical. It does not follow of necessity that the physiological action of extracted thein is identical with the caffein of coffee prepared as a beverage. According to Hutchinson, raw Mocha coffee contains 1.08 per cent. caffein which is reduced to 0.82 per cent. by roasting. Only from 25 to 35 per cent. of coffee infused goes into solution. The average quantity of coffee infusion taken at meal time or otherwise, is smaller by far than is made to appear by its accusers. The actual dose of caffein, i. e., of the coffee caffein in such infusion is also much less than is made to appear by its critics. Comparison between the dose in grains of extracted caffein employed as a cardiac stimulant therapeutically, and the actual amount of natural caffein in infused coffee, will suggest that the dose of caffein in coffee taken as a beverage is entirely too small to produce the physiological effects ascribed to it. Too often physicians think in terms of gross instead of in terms of net. For example, many regard egg albumin as practically all nutriment, whereas in fact 86 per cent. of it is nothing but water! "A sense of proportion is a great iconoclast." The fallacy of perhaps the most used argument against the reasonable use of coffee is thus apparent.

What, as a matter of *fact*, is the action of coffee when taken as a beverage? See next issue.

Copyright 1920 by the Joint Coffee Trade
Publicity Committee of the United States

eral models are offered, but all are of the same general construction; the main difference lies in the size of the lamp. The lamp of 500 candle power is, perhaps, most useful for routine work although the company offers a model with which a very intense heat, from a 2000 candle power lamp, can be concentrated upon the part affected.

Everybody eats bread. It is regarded as the "staff of life." Our purpose is to get you to see some things concerning your chief article of diet that everybody should know. It is not to amuse and entertain, but to give needed information and stir you up so as to better enjoy life. It will be to your interest as a bread earner and bread-eater. If you will read and think and act upon its information and suggestion, it will give you strength of days and comfort of life such as you and your posterity can never expect to otherwise attain—if you really want to make the most of life.

It is a startling fact that white bread and white flour have, for a century, been a curse to English and American people, according to science. Human experience has been demonstrating it. To this and other similar denatured foods are charged the ravages of consumption, constipation and its ill; and likewise nerve troubles, with which 50 per cent of the people are afflicted.

Bread is made white by robbing the whole wheat of three-fourths of its nutriment—just such elements of foods as are essential to the human body. If you did but know it, wheat is a perfect food product, containing all the elements necessary to health. These are principally in the brown outer skin of the wheat grain, and are bolted out in the process of making our fine wheat flour. *The remainder is a starchy, sticky, chalky, substance, and it is used for bread; its very whiteness typifies sickness!* For every ounce of nutriment removed the human system suffers. It is said that "our American people are afflicted with mineral starvation," in the opinion of our best physicians.

Our best writers on hygiene admit the truth of these statements and that if we do not get these elements in the wheat flour they must be obtained elsewhere, and with greater trouble and expense to make a well-balanced ration in our regular diet; or to supply and satisfy the demands of the physical system.

Patent medicine vendors tell us that these "substances" can be supplied to us in concentrated form, and easy to take, in their nostrums. Hence the many enterprising drug stores, supported by an afflicted public, where these medicines may be obtained. To take them regularly, however, in the form of drugs, you will very likely find irritating and debilitating and shortening life, instead of nourishing, invigorating and strenghtening the constitution and lengthening your days. Medicines are for the purpose only of aiding nature in any given case to overcome its weakness and get its strength again.

But why use these minerals in bottles and powders and pills, sold at high prices, when the same are contained in proper proportions, sup-

NOW ENTIRELY AMERICAN

MADE BY THE ORIGINAL PROCESSES

Sajodin

PALATABLE and EFFICIENT
IODIN MEDICATION

Especially for Prolonged Use as in
ARTERIOSCLEROSIS

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Helmitol

AGREEABLE and RELIABLE
URINARY ANTISEPTIC

For Acute and Chronic Cases of
CYSTITIS, URETHRITIS

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VERONAL and VERONAL-SODIUM

The Well-Known Hypnotics

Sold Exclusively by
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LOESER'S INTRAVENOUS SOLUTIONS

For the Progressive Physician Seeking Improved Clinical Results

These sterile stable solutions, intended for intravenous injection exclusively, are contained in hermetically sealed non-soluble glass ampoules.

	Volumes and Contents	Indications
IRON AND ARSENIC	5cc Iron Cacodylate, 64 mg. (1 grain)	The most positive and prompt method of raising blood count and hemoglobin contents. Anemias, Malaria, Pellagra, Psoriasis, Neurasthenia, Syphilis, Skin Diseases, Tuberculosis, Chlorosis, Pericarditis.
ARSENIC AND MERCURY	20cc Sodium Dimethylarsenate, (Cacodylate) U. S. P., 2 Gms. (31 grains) Mercury Iodide U. S. P. 5 mg. (1/12 grain). Also in 1.5 gm. and .7 gm. doses.	Syphilis, Tropical Fevers.
SODIUM IODIDE	20cc Sodium Iodide U. S. P. 2 Gms. (31 grains).	Asthma, Chronic Arthritis, Syphilis, Nephritis, Tuberculosis, Glandular involvements, Pneumonia.
SALICYLATE AND IODIDE	20cc Sodium Salicylate U. S. P., 1 gm. (15 grains) Sodium Iodide U. S. P. 1 gm. (15 grains).	Grippe, Influenza, Acute and sub-acute Streptococci infections.
SODIUM SALICYLATE	5cc Sodium Salicylate U. S. P., 1 gm. (15 grains).	Tonsilitis, all Streptococci infections, Acute Arthritis, etc.
MERCURY BICHLORIDE	5cc Mercury Bichloride, 16 mgs. (¼ grain).	Syphilis, Erysipelas, Influenza, Gonorrheal Rheumatism.
MERCURY OXYCYANIDE	5cc Mercury Oxycyanide, 8 mgs. (⅛ grain)	Syphilis, etc.
QUININE DIHYDROCHLORIDE	5cc Quinine Dihydrochloride U. S. P., 5 gms. (75 grains).	Malaria, etc.
HEXAMETHYLENAMINE	5cc Hexymethyl. U. S. P. Uretropin Formin, 1.5 gm. (24 grains).	Pyelitis, Cystitis, Colon infections, Toxemias of Tuberculosis, Pelvic infections, Pneumonia, Meningitis, etc.

TECHNIC: Do not dilute this solution. Break Ampoule, draw into all-glass syringe and attach a 23 to 25 gauge hypo needle. Use tourniquet or have patient grasp the arm with his free hand until the veins at the bend of the elbow stand out prominently; run the needle into the vein quickly. Blood usually comes back into syringe back of needle or can be drawn back to be certain that needle is in the vein; release pressure, then inject slowly.

Send for complete list of Intravenous Solutions, Reprints and Clinical Data.

New York Intravenous Laboratory

110 East 23rd Street, New York City

Producing ethical Solutions for the Medical Profession exclusively.

plied by nature's best and most beneficient alchemist, in the natural grain of the wheat? Why not adopt the more simple, sensible, satisfactory and less expensive method of furnishing the physical system with the ingredients acknowledged to be absolutely essential to the needs of the human body—the perfect food product necessary to health and happiness found in the brown, outer skin (the bran) of the wheat grain—that which is bolted out in the modern process of making our fine white flour? In other words, why not use whole wheat flour, with the bran? It is wholesome and good for the strong and healthy as well as the invalid.

Now, this is not written in the interest of any particular brand of whole wheat or graham flour. It is a simple, candid statement of the author's own knowledge, his own experience and observation for near three-quarters of a century, and only in the interest of suffering humanity. He is confidently appealing to the intelligent readers of this great home paper, who are seeking health and happiness, to give proper consideration to what is here written, and save themselves and their posterity from unnecessary sickness and suffering, and an early death.

K. K. K.

Taken from "Farm & Ranch" July 15, 1916.

The use of glandular extracts is not new as an idea for the ancients seem to have grasped it; at least in a crude way they made use of them remedially. In the light of our present learning, with beacons to guide us as it were, we are in position in this day to use them more intelligently and with more certainty, and renewed interest in this therapy is now manifest.

The therapy consists in giving such extracts or substances (1) for the purpose of providing artificially the trophic stimulation that is minus or lacking; or (2) for the purpose of inhibiting the plus or overactivity of another gland, it being recognized that the endocrine glands are interdependent, one acting as a check on another in the chain.

The serum for goitre, conceived by Dr. Mark White is derived from the blood-serum of animals suffering from deficiency of the para-thyroids. The originator of the serum found, in goitre and dysfunction of the thyroid in persons, that such condition was improved when injections were given, the thyroid returning to its normal size and the subjective symptoms co-existing changed for the better.

It is customary to value cod-liver oil simply as a source of fats and so to give it in medicinal doses to supplement the fatty elements in the daily fare. In this light it becomes merely a food, although administered by means of a spoon, plain or in some kind of vehicle, as any medicine might be. But analysis shows that besides fatty principles the oil contains several therapeutic principles among them alkaliods, amines and certain organic compounds having the chemical characteristics of lecithin. It is claimed that a very large part of the benefit

SPIROCIDE

A New Mercurial Treatment for Syphilis

BY FUMIGATION AND INHALATION ONLY

NO NEEDLE—NO INUNCTION—NO STOMACHIC MEDICATION

NO APPARATUS NECESSARY — TECHNIC SIMPLE

SPIROCIDE CORPORATION

153 W. 23d St. - - New York City

SEND FOR THIS FREE PACKAGE OF THORO SKIN CLEANSER

White Enamel Holder Price....$3.00

IT'S BETTER THAN SOAP

Doctor, we want you to try THORO at our expense. We want you to try it on your own hands and see how soft and smooth it makes them. You will be surprised.

THORO is a remarkable combination of sterilized corn meal, olive oil and boracic acid. It comes in a nickel top refillable 4 ounce container, fresh to your hands—the first it has ever touched. It makes a delightful creamy lather which removes every trace of dirt. No matter how often you wash your hands you will find THORO prevents chapping and cracking of the skin. It is fine for bath, face, shampoo, and for all toilet purposes. Dr. H. J. Achard of the Clinical Medicine staff, says. "THORO is the best thing for shaving I have ever used." Doctor, send for a package today. It's free.

We also supply THORO in one pound packages at $1.00, and a beautiful white enamel dispenser for $3.00. This should be in every doctor's office, every hospital and public institution. To physicians desiring to install THORO in their offices and homes, we will send installation outfit of dispenser and one pound package of THORO in carton, prepaid, for $3.50. Two THORO outfits, one for residence and one for office, may be ordered at this price.

THE THORO CORPORATION
225 W. Huron St., Chicago, Ill.
Dept. L.

☐I enclose $.... for which send me.....
Combination Outfits for THORO installation.
☐Please send me Free Sample 4 oz. package.

Name .....

Address .....

had from cod-liver oil is due, not to its fats, but to these last-named constituents.

This is important and well to know. It relieves the doctor of the necessity of prescribing the oil in its clear unchanged state, and even in emulsion. He may then with all due confidence give a preparation that is agreeable to the taste, in which there is not the slightest suggestion of its fishy origin, such as Hagee's Cordial, for instance, which contains the non-fatty extractives of the oil, including the phosphorus-bearing lecithins above referred to. Children and finical adults will take this preparation readily. Samples are offered by the Katharmon Chemical Co., St. Louis.

Until recently yeast was interesting chiefly to the baker; it was altogether alien to the doctor. But in 1899 Brocq impressed the importance of it therapeutically, and now it is being recommended by the Fleischmann Company, in the form of yeast-cakes, known to the oldest of us from boyhood, for the treatment of acne, furunculosis and other ailments at bottom due to defective metabolism. It is not known for certain how it acts but good results are reported to follow its use.

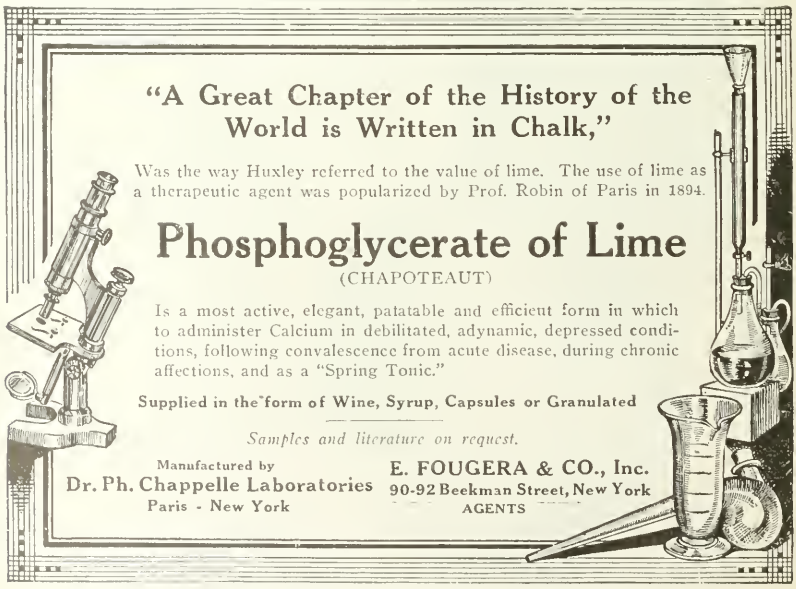
These results are thought to be due to its laxative effect. Yeast is usually laxative, with gas formation. Further, its curative action, in suppurative skin affections is said to be due, in part, to the fact that it stimulates leucocytosis.

Yeast therapy is novel; little or nothing on the subject is to be found in the standard texts. However, those who desire to investigate it should write for a copy of the brochure, issued by the company named, who are the largest makers of yeast in the world. See their announcement in this issue.

Digitalis continues to hold its prominent place as a heart remedy, although it has suffered some loss of reputation because of inert and otherwise unreliable preparations. The galenicals reposing on many shelves are hardly representative of the drug.

Westerfield's Tablets are offered to practitioners with the claim that their digitalis is prepared from the true leaf of good grade, is physiologically tested and standardized, and separated out from the extraneous elements residing with it in the drug plant. Each tablet is said to represent five minims of the tincture of digitalis of the prescribed glucoside strength. In accord with the view that digitalis is properly absorbed from the intestine, into the general circulation, the tablet moreover is so coated as to resist disintegration by the gastric fluids. No gastric disturbance follows their ingestion, it is said.

A few weeks ago I received a sample of Chlorazene. Have for years suffered with granulated lids and chronic styes—one crop of styes after another—and nothing I used could stop them. I used Chlorazene solution several times a day, and there has not been any recur-


"A Great Chapter of the History of the World is Written in Chalk,"
Was the way Huxley referred to the value of lime. The use of lime as a therapeutic agent was popularized by Prof. Robin of Paris in 1894.
Phosphoglycerate of Lime
(CHAPOTEAUT)
Is a most active, elegant, patatable and efficient form in which to administer Calcium in debilitated, adynamic, depressed conditions, following convalescence from acute disease, during chronic affections, and as a "Spring Tonic."
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AGENTS

THE TEST
OF
THE TAMPON

The test of the tampon lies in the action and effect of the medicament it carries upon existing local inflammatory processes. Commonly used agents of this sort act only indirectly as a rule. DIONOL is something decidedly different. It acts efficiently because DIONOL reaches and affects **local inflammation,** acting in accord with the electro-pathology of this morbid process.

USE
DIONOL
ON
TAMPONS

In the Treatment of

Endometritis	Cervical Ulceration	Metritis
Ovaritis	Pelvic Cellulitis	Leucorrhoea
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Judge Dionol by Performance

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Detroit, Mich.
Dept. 20.

Please send literature, Case Reports, etc.,

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THE DIONOL CO.

864 Woodward Ave.

DETROIT - - MICH.

rence of the styes since I began its use. My eyes are now better than they have been for several years.

J. STIDHAM, M. D.

Annona, Texas.

Any obvious improvement on the old finds a welcome waiting and a ready market. The old flaxseed poultice was certainly good in its way. It served as a means of applying heat to a congested part. But it was smelly and uncleanly, and for these reasons was objected to by the more fastidious. Besides, flaxseed is not the best material for poultices; it does not retain heat so well as some other materials.

The idea of resorting to aluminum silicate (clay of a certain selected grade) was a happy one. The idea of using it as a basis for poultices and adding to it glycerin, boric acid and aromatic substances was a furtherance. The result is a poultice material that retains heat very well, that is easily handled and is cleanly and unobjectionable. Under the name of Antiphlogistine it is well known to medicos everywhere.

It is a good application often for localized congestion, with more or less pain associated. To those who wish to test it clinically the Denver Chemical Co., 24 Grand St., New York, are quite willing to send samples.

Chlorine as an antiseptic and germicide is probably better thought of today than it ever was before. Recent investigation supports the contention that it has merit. It only remains to decide what chlorine-carrying preparation shall be used, and this again depends upon the precise use to which it is to be put.

When disinfection and deodorization of sickroom utensils and toilets and household sinks and pantries is purposed, Platt's Chlorides, in use for more than thirty-eight years, is very satisfactory according to the general opinion. The doctor may safely recommend it for household disinfection, in the interests of sanitation, to forestall and to prevent the spread of contagious diseases. A can of Platt's Chlorides in the house, used as often as necessary, is the means to a good end, that of keeping the abode clean, wholesome and habitable.

This agent is odorless, which is in its favor; also it is cheap, which is again in its favor. And whether effective, the doctor can ascertain for himself by trying it out in his own home or office. Samples are free for this purpose.

For quick elimination there can be no doubt that the saline or hydrogogue laxative is best and on the whole preferable to plant drugs and derivatives which accomplish the end more or less well by irritant action on the intestinal muco.ae; in the latter case peristalsis is stimulated but at a cost that is best avoided when it may be. A third class of eliminants, which act mechanically by lubrication are too slow for many purposes, although excellent for others.

The inorganic sulphates in artificial or nat-

Leucorrhoea
Cervical Ulceration
Menorrhagia

Vaginitis
Endometritis
Abortion Sepsis

Congestion
Mild Prolapse
Pruritus

are indications for the use of

MICAJAH'S WAFERS

which are: Astringent, antiseptic, antiphlogistic, styptic, stimulating, deodorant, soothing and healing. Easily applied, prompt to act, prolonged in effect.

MICAJAH & CO., Warren, Pa.
Send samples of Wafers, literature and booklet, "Diagnostic Aids".
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A Test Will Demonstrate

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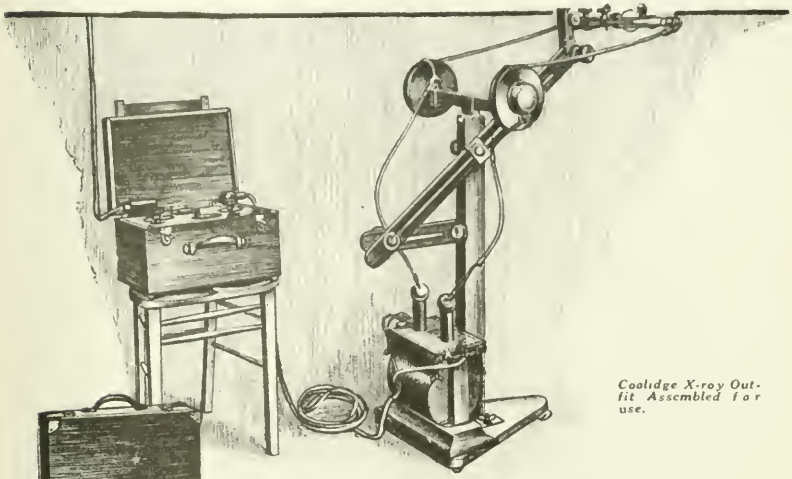
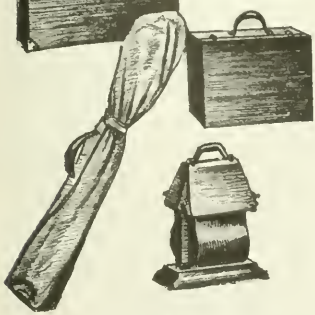
An X-Ray apparatus that can be conveniently taken to the bedside of a patient has long been needed by the medical profession



Coolidge X-ray Outfit Assembled for use.



This is how the outfit looks when packed for transportation — weight 125 pounds — easily transported — quickly assembled.

The Coolidge X-ray Outfit

Portable Radiographic Type

A new outfit for radiographic work, developed by the research laboratories of the General Electric Company, is designed both for office use and for work at the patient's bedside.

The Coolidge X-Ray Outfit can be operated directly from any lamp socket and requires no special wiring. The capacity of the outfit is 10 milliamperes at a 5-inch spark gap. It will do all radiographic work except gastro-intestinal.

The tube used is specially designed for this outfit. It is only 14 inches long with a bulb diameter of 2½ inches and is made of lead glass equal in protective power to 1-16 of an inch of metallic lead. The focus is very fine, producing radiographs with extremely good definition.

For further information address
Supply Dept., General Electric Company, Schenectady

35B-35

General Electric Company

General Office Schenectady, N.Y

Sales Offices in all large cities

ural solution are among the most effective of the hydrogogue laxatives. Such is Pluto Water, for example; it enjoys esteem as a mineral water not only in this country but further south. And be it said, in the tropic climes south of us the mineral waters are more popular than with us.

Pluto Water is bottled in Indiana, at French Lick Springs. In the bottling great pains are taken to keep the water pure and clean during the process. Samples are sent for trial to those who wish them.

An educated man, it is said, is one who knows where to find facts and data when wanted rather than one who carries a large fund in his head. The carrying capacity is quite limited for the average person and we doubt the wisdom of straining the memory faculty.

Some doctors in this sense are highly educated and some are not. Some are constantly floundering when they ought to be on sure ground and when in urgent need are obliged to stop and search, in a haphazard manner, or make inquiry, which takes time often when time is a desideratum. A certain pessary is wanted, for example, or a dressing. The doctor knows what is needed, knows that it is available in the market, but the precise source he does not know. He has seen the address but failed at the time to make note of it.

Perhaps it was this: Huston Bros. Co., 30 F Randolph St., Chicago. Here is a depot for many and various medical and surgical appliances, some of little renown, known only to a few, but extremely useful in practice. It is well to be on the mailing list of this firm.

Time brings changes in every department of life. Of this we are reminded by the news from Stearns & White Company, of this city, that the firm has changed hands and is now under new management. The name is familiar to many of our readers and has been for years. In fact, the business of this house began as far back as 1887.

Just what deviations from the old policy are contemplated we do not know. However, we understand the same general output will be continued, including the specialties of this firm, for which demand has been well established in years past. Its private formula work, with special attention, has become quite considerable. Efforts in this direction are to be maintained. Work of this kind requires special facilities with which Stearns and White under the old management were amply provided.

Excellence deserves recognition and growth comes with well doing. Our best wishes go to the new people in charge, for their success. We hope for the new enterprise the enthusiasm and fecundity that makes prosperity.

The doctor is often asked to recommend things. The variety of subjects brought to him by his following is large indeed. He may be asked to give an opinion on anything from a

The Management of an Infant's Diet

Infants' Stools

Regularity in bowel movements contributes much toward normal, healthful progress, and a knowledge of the number and character of the stools during each twenty-four hours is an important part of the general management of early life and assists much in properly adjusting the diet.

Suggestions for the regulation of infants' stools by slight changes in the make-up of the diet and particularly in relation to

Constipated Movements

are given in our book, "Formulas for Infant Feeding," and in a pamphlet devoted especially to this subject. This literature will be sent to physicians who are interested in the matter.

Mellin's Food Company, Boston, Mass.

Welch's Grapelade

the pure grape spread

IN the hospitals and sick rooms, Grapelade is gaining the same popularity as Welch's grape juice. Made from whole ripe, rich Concord grapes, Grapelade is truly the "honey of grapes".

The most delicate stomach will find nothing in Grapelade to disturb its functions, it is all grape with only seeds and skins removed. The acid crystals are eliminated by the special Welch patented process. Only pure sugar is added.

Physicians and Dietitians everywhere welcome Grapelade as a worthy addition to the patient's diet.

The Welch Grape Juice Company, Westfield, N.Y.

hair-net to a pulmometer. For his own sake and that of humankind in general he ought to be prepared, but in this instance, as in many another, advice is readier than accomplishment.

Still in all seriousness it may be said, in regard to life-saving devices, that this is a subject in which he should be more or less interested and well versed. Hospitals, factories and various institutions are now equipped with some device for resuscitation, after imminent drowning, syncope, and coal-gas poisoning.

What is the best device to be had for this purpose? That is a question the doctor may be called upon to answer. If he names the Lungmotor he will probably be right. It is pictured in this issue. It is said to be reliable, simple of construction, and easy to operate in any emergency. There are 6,000 in use, we are told.

It is the firm belief of many doctors that some remedies afford more certain results, as well as quicker results, when given intravenously. And in spite of the discomforts of puncture and the fact that injection of medicaments into veins imposes some technical difficulties, although it is said they are mastered with practice, quite a number are giving iron, arsenic and other drugs in this way.

The New York Intravenous Laboratory (110 East 23rd St.) are offering ready-prepared solutions of such drugs for injection. They list more than a dozen. Each solution comes in ampules ready to inject. One of their leading numbers is iron cacodylate, a combination of iron and arsenic, which is said to be most effective in the treatment of anemia, chlorosis and other conditions of blood impoverishment, increasing the number and quality of the red cells. Some go so far as to say that it is possible to demonstrate a positive increase of red cells after each injection.

The iodides also are reported to give good results when introduced into the circulation by the direct route.

The venereal diseases until recently were kept in concealment, out of discussions and the public prints. But fate decreed that with the onset of war they should have wide publicity. And as a result the general public today knows more truth in reference to these diseases, their transmission and their seriousness, than ever before.

With this awakening has come new ideas in reference to the prevention and cure of syphilis. Salvarsan of course was a signal gain therapeutically, being far more satisfactory than mercury and arsenic in their old forms. But still even this agent has its drawbacks. It carries an element of hazard and for many patients is plainly contraindicated.

Among the new things offered to the doctors for the treatment of syphilis, is Spirocide. It is given not by mouth nor by injection but by fumigation. Now fumigation in a crude way was practiced in ancient times. Latterly it has been all but forgotten, so that now, as revived, it comes quite in the way of an innovation. This treatment, without needle and puncture, which

CALCREOSE

Better Creosote Medication

Dr. Lawrason Brown of the Trudeau Sanatorium, Trudeau, New York, speaking of the use of creosote in the treatment of pulmonary tuberculosis, in Osler's Modern Medicine, Vol. I, p. 504, says:

"* * * * seems to act almost as a specific on the accompanying bronchorrhea and intercurrent attacks of simple bronchitis."

The principal reason why creosote has not been used to a greater degree is because of its untoward effects on the stomach.

CALCREOSE contains approximately 50% of creosote.

CALCREOSE has full creosote action but is free from any untoward effects on the stomach, even when administered in comparatively large doses. Therefore,

CALCREOSE is an ideal form of creosote medication.

Write for Further Details

The Maltbie Chemical Company
NEWARK, NEW JERSEY

An Intensely Interesting Booklet for You

IN the treatment of simple constipation, Liquid Albolene (from Russian Oil) has more than one established fact and scientific reason to justify and recommend its use. It has no medicinal or drug action, hence cannot irritate, overstimulate or aid in the formation of a habit. Physiologically it is inert.

It cannot interfere with or modify digestive, metabolic or absorption processes. It secures and produces its result by teaching or persuading the bowels to resume or recover normal physiological function and habit.

Samples—literature

McKesson & Robbins, Inc.

Manufacturing Chemists

Established 1833

91 Fulton Street, New York

many persons dread, will no doubt find approval The Spirocide Corporation invites inquiry.

An error on the part of our printers, in justice to all others concerned, requires a note of explanation. It concerns the advertisement of the McIntosh Battery and Optical Company, which appeared in our February number, and consisted in repeating an old advertisement of theirs instead of the new copy supplied, a mis-statement of facts resulting. The aforesaid firm is no longer the exclusive maker of the Silent Roentgen Transformer. This apparatus is now being manufactured by the Kny-Scheerer Corporation, of New York, under the same license, by whom prices will be quoted and orders promptly filled to the medical profession.

Needless to say, we are willing and glad to make this correction.

In medical practice today one would as soon think of dispensing with a thermometer as with a blood pressure appliance. To determine what the blood pressure is, for the person presenting himself the first time for treatment becomes part of that thorough examination which the careful doctor makes preliminary to diagnosis and treatment. It is one of the important clinical tests in the daily routine.

Many appliances are sold for the purpose. Among the best is the Sanborn, to which a full page is devoted in our journal this month. In one respect at least it is to be recommended over others, to wit, it is most durable and for this reason suitable for general and country practice. One's instruments get many a jolt and hard knock over the more or less rough roads that must be traversed. Some appliances are too delicate of construction to withstand such usage and are constantly getting out of order and sent in for repairs, although in the office they may do very well.

The gage of the Sanborn appliance is exceptionally strong and resistant to jolts. As a test, it has been thrown a distance of twenty feet without being deranged and has survived repeatedly a drop of five or six feet on a hard concrete floor. It is certainly built for service.

POND'S EXTRACT

The distressing stinging and congestion caused by the acute nasal affections prevalent during May and June can be promptly relieved by spraying the nasal passages every hour or so with the following:

℞ Adrenalin Chlor. m. XX
Pond's Extract dr. I to II
Aquae destil q. s. ad. oz. I
M et Sig. Use as spray every hour or two.

POND'S EXTRACT CO.
New York and London

ROSE COLDS

FROM PUBERTY TO MENOPAUSE

THROUGH this period most women suffer from uterine neurosis, and as Godell so aptly describes it, "the intangible, imponderable, invisible pelvic pains of neurotic women."

HVC

Anticipated monthly attacks of Dysmenorrhea, the exhausting effects of Menorrhagia, and the nervous symptoms of early pregnancy call for the administration of HAYDEN'S VIBURNUM COMPOUND, presenting its well-known antispasmodic and calmative action as a preventive and as a treatment in neurosis.

It should be given in teaspoonful doses, three times a day, administered in hot water. Literature, formula and samples upon request.

NEW YORK PHARMACEUTICAL COMPANY
BEDFORD SPRINGS, BEDFORD, MASS.

From 1 to over 300

The gradual increase of Lungmotor protection from one device six years ago to the use of from 6 to over 300 each at present by

U. S. Government
American Red Cross
Bellevue Hospital
New York State Hospitals
City of Chicago
City of Buffalo
Standard Oil Co.
Lehigh Valley Coal Co.
Texas Oil Co.
Flower Hospital
General Motors Co.
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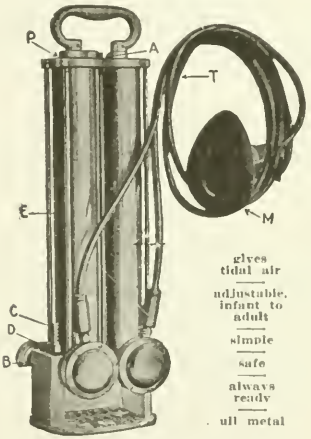
(There are over 6,000 other Lungmotor users.)



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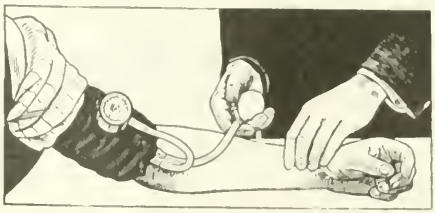

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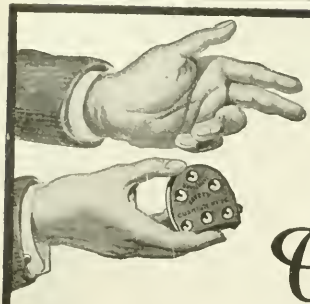

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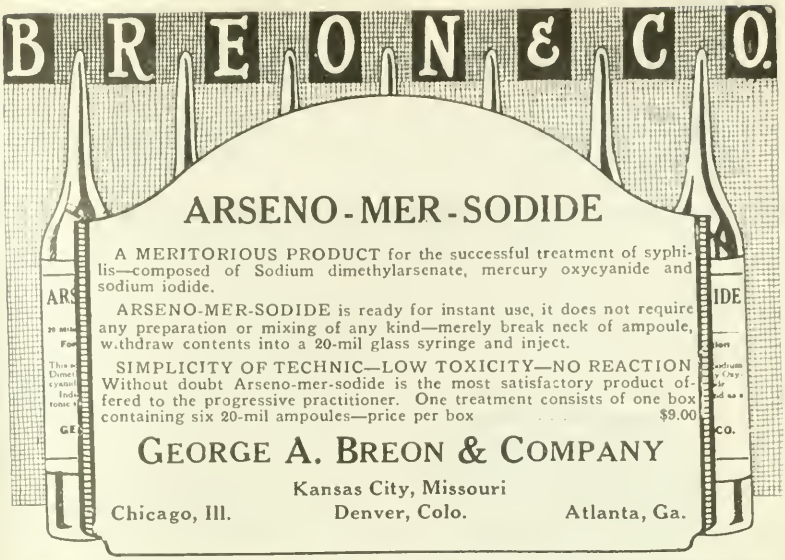
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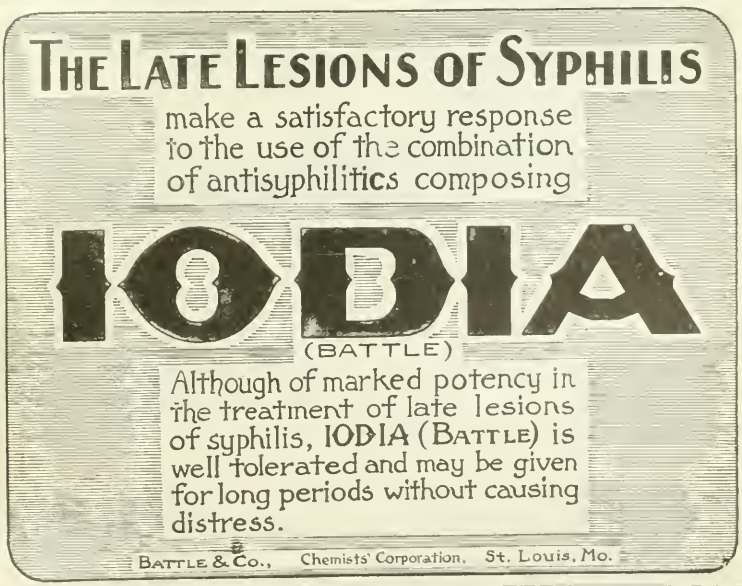
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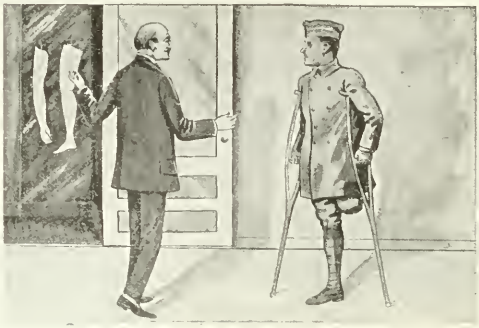

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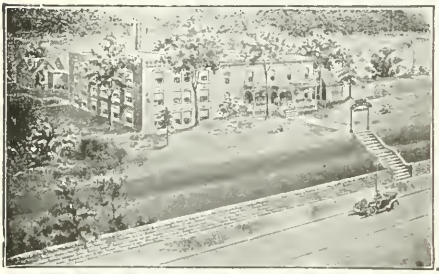

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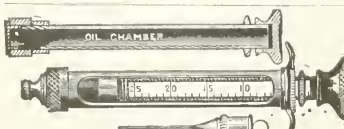

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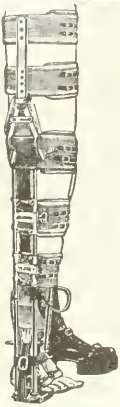

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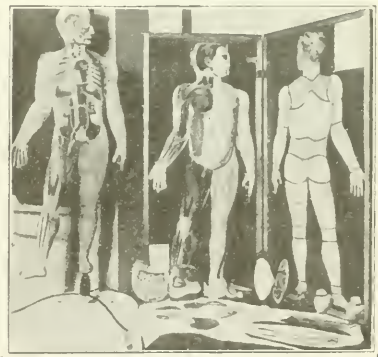

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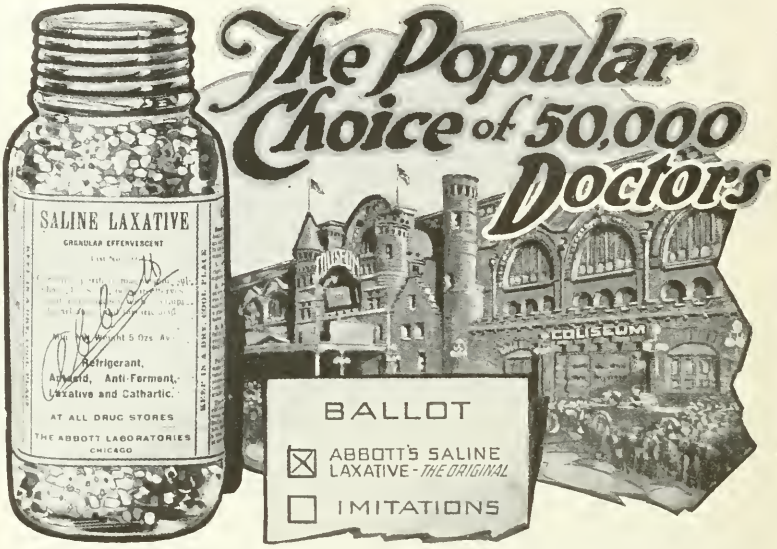

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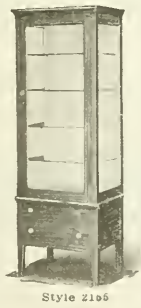

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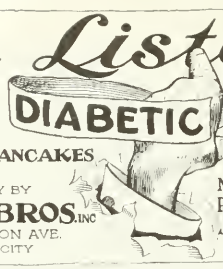

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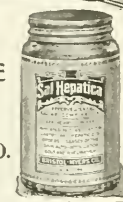

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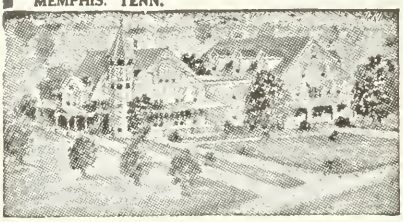

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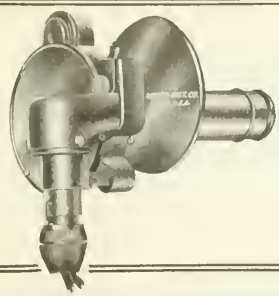

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